

Abstract Feature Representation as a Cartographic Device

(For Mixed-Reality Location-Based Games)

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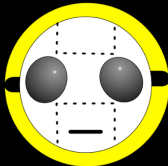
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Location Based Games

Mixed Reality

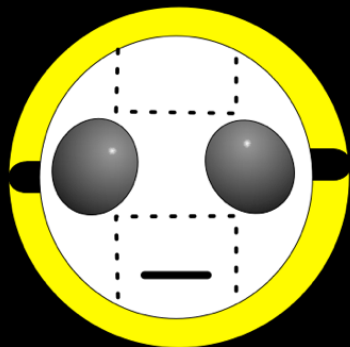
HEAD-DOWN GAMEPLAY

HEAD-UP GAMEPLAY

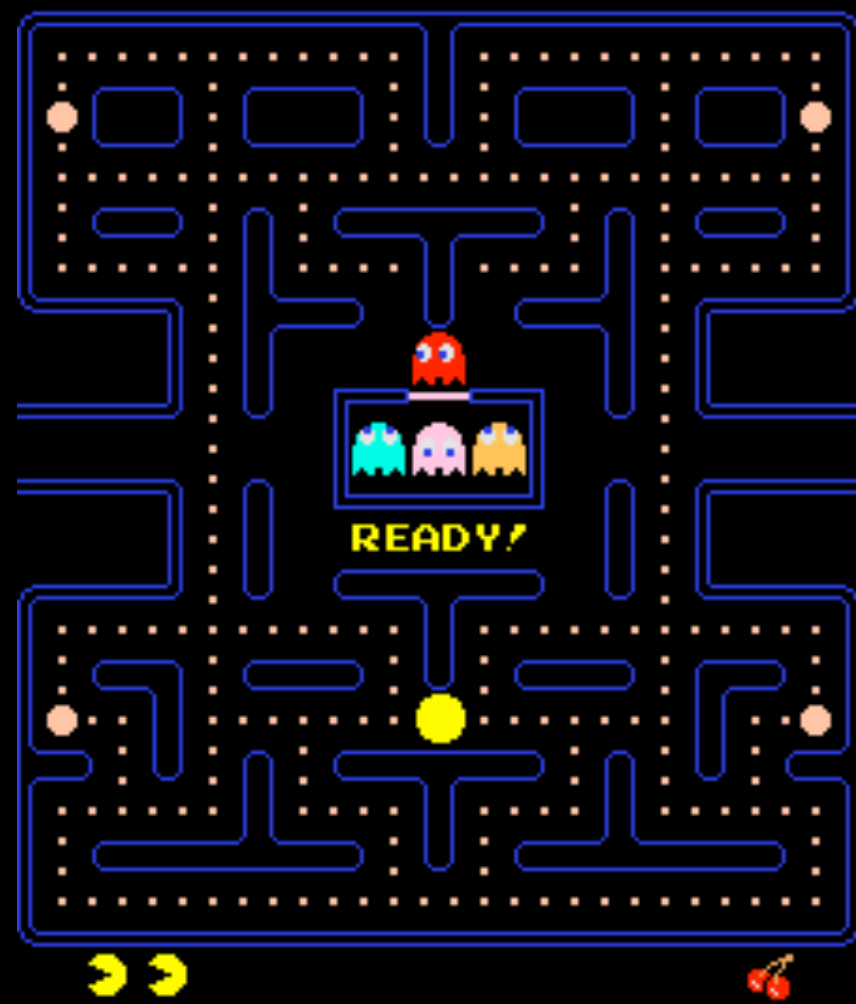


PAC-LAN

ZOMBIE
APOCALYPSE




1UP 00 HIGH SCORE 00





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ABOUT 

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Pac-Lan is a [Mobile Radicals](#) project which utilises RFID technology to create a mixed reality mobile phone game.

For more information about the project please visit the [About](#) section.



News

15th February 2006

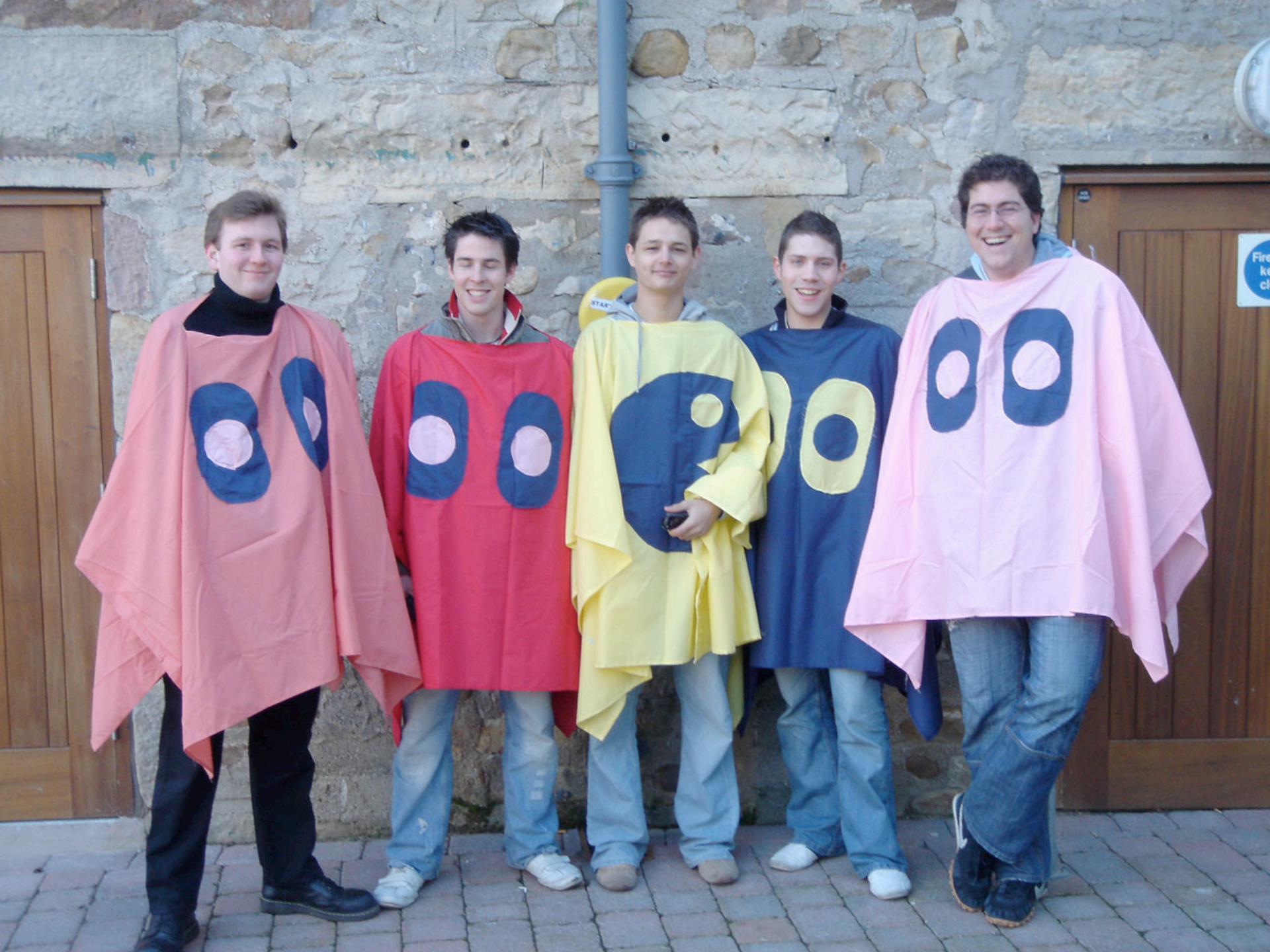
A [3rd trial](#) of Pac-Lan took place on the 10th of February (we actually had some sunshine this time!). Photos and a video of this trial are [now available](#).

2nd February 2006

Conducted [another full-scale trial](#) of Pac-Lan today. Take a look in the [Media](#) section for videos and photos.

29th January 2006

Yesterday (28/01/06), the [Mobile Radicals](#) team, conducted the first full-scale trial of Pac-Lan. Everything went well, although we were all surprised how tiring the game turned out to be (our game area was 300 metres square).







TIMES HAVE
CHANGED...

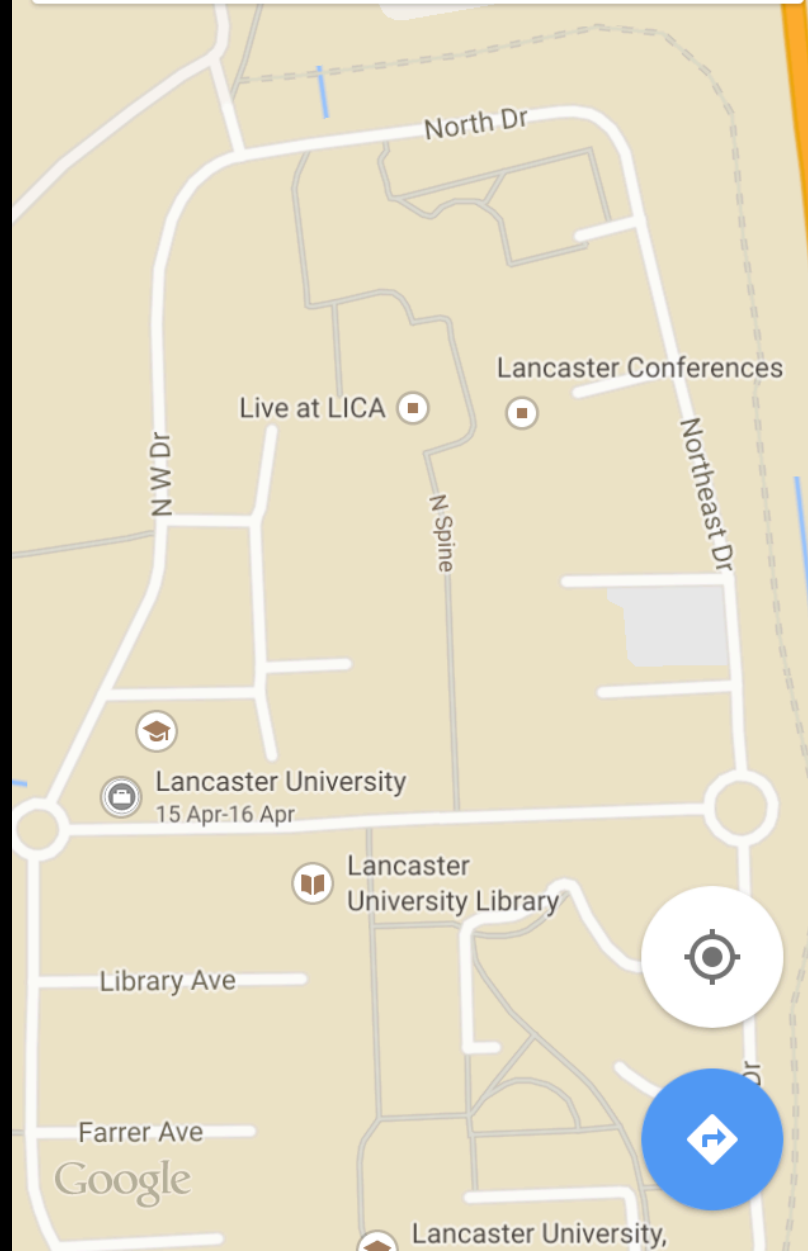




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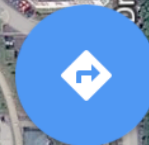
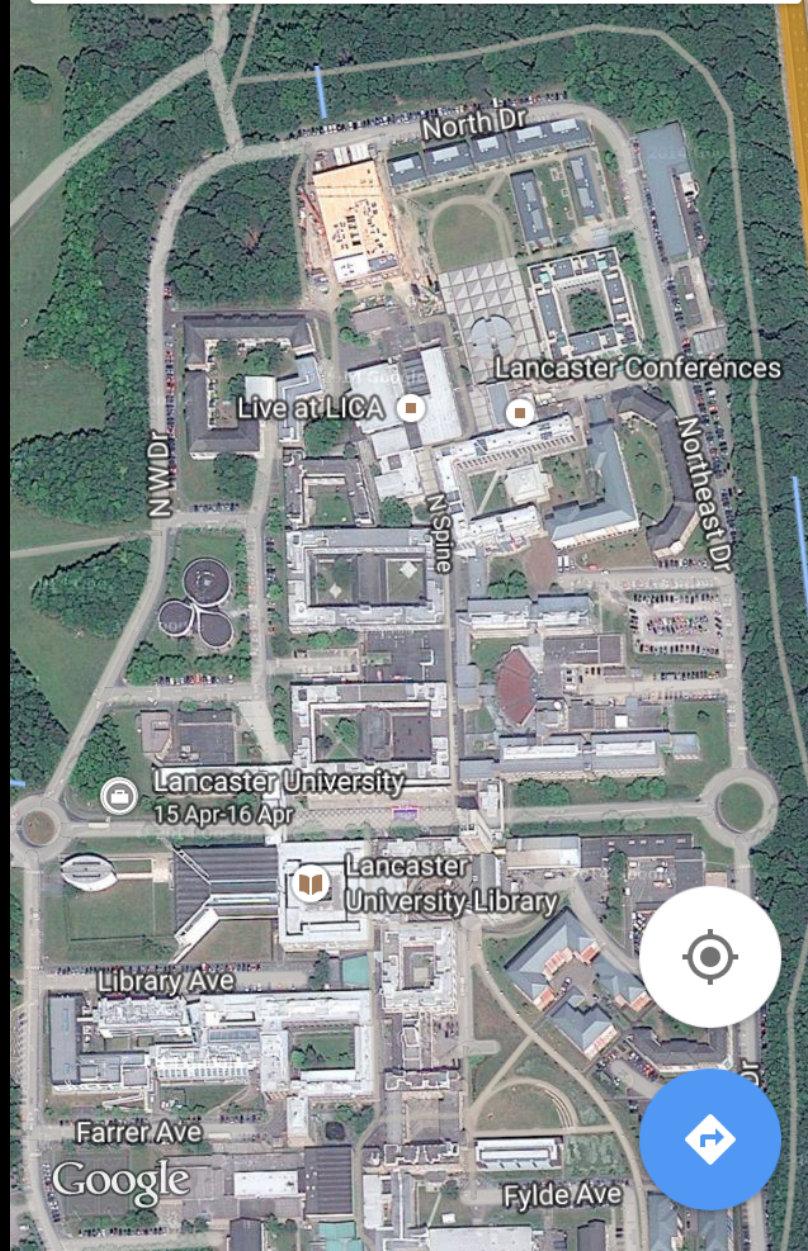


Google





Google



DESIGN

Design Goal:

1. Promote immersion into the game through the use of a suitable aesthetic

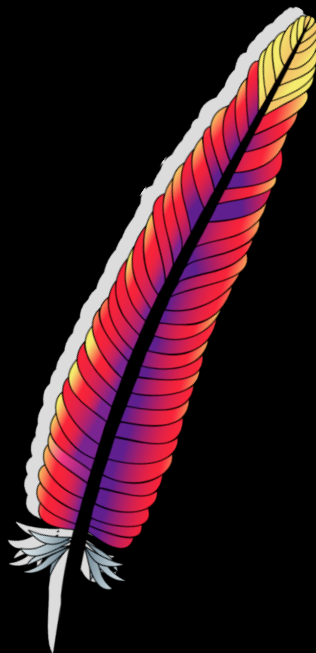
Design Goal:

2. Perform well in the context of a mixed reality LBG (running, outdoors)

Design Goal:

3. Encourage players to navigate 'head-up' rather than 'head-down'

ABSTRACT FEATURE REPRESENTATION



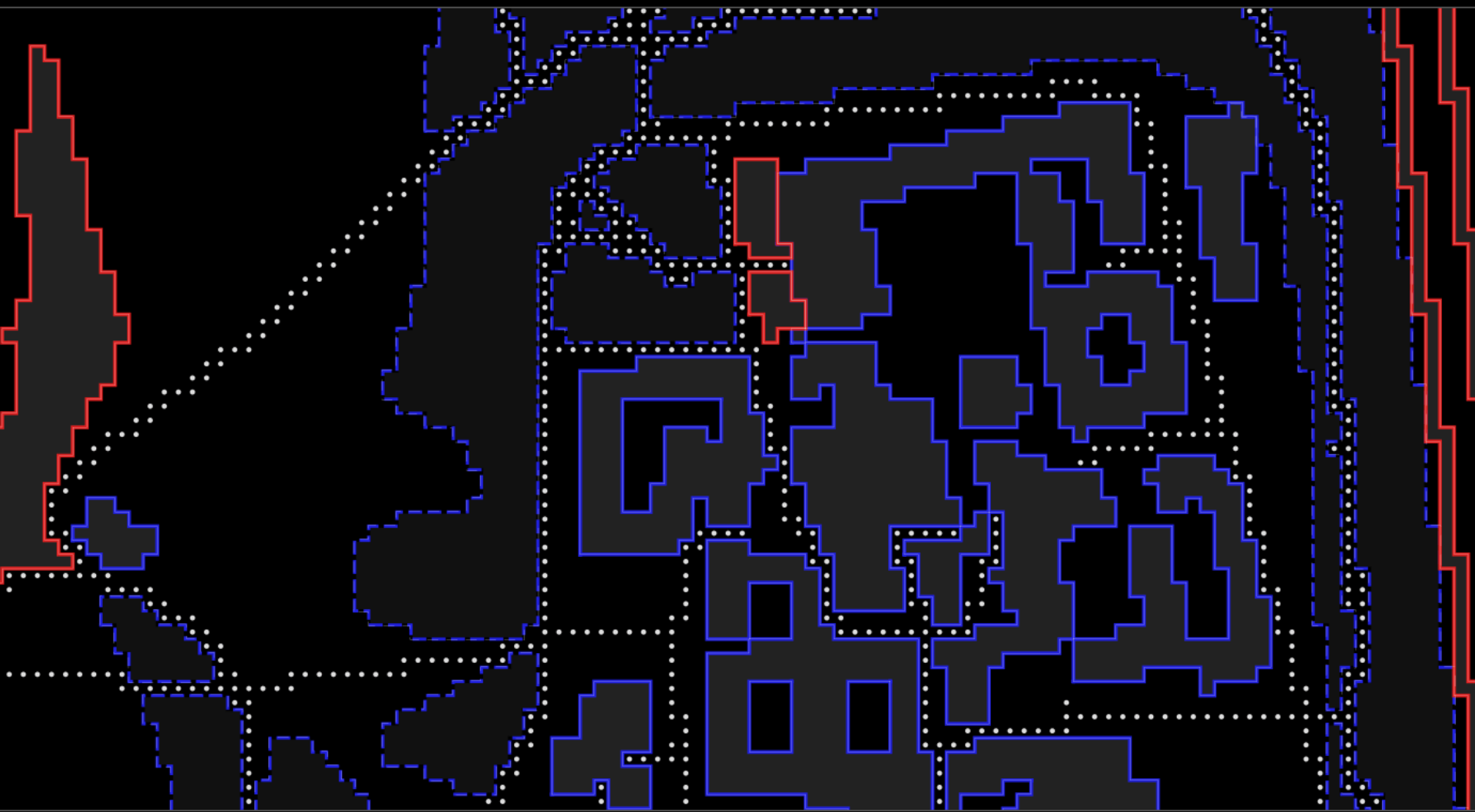
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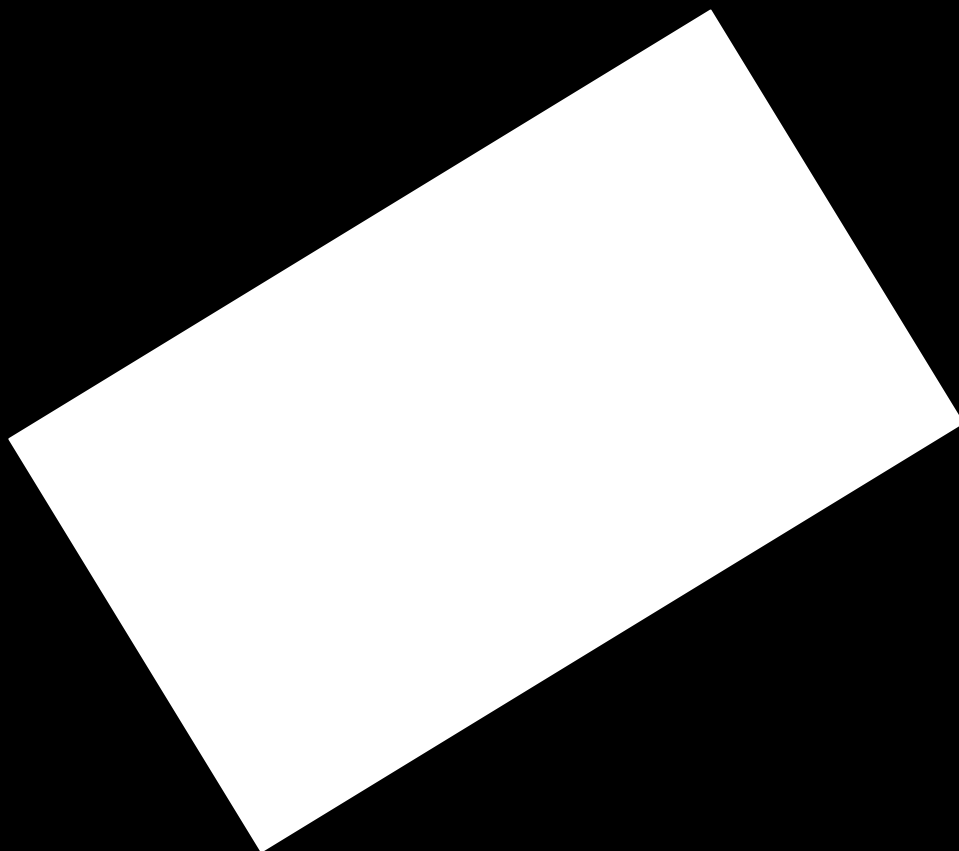
OpenStreetMap

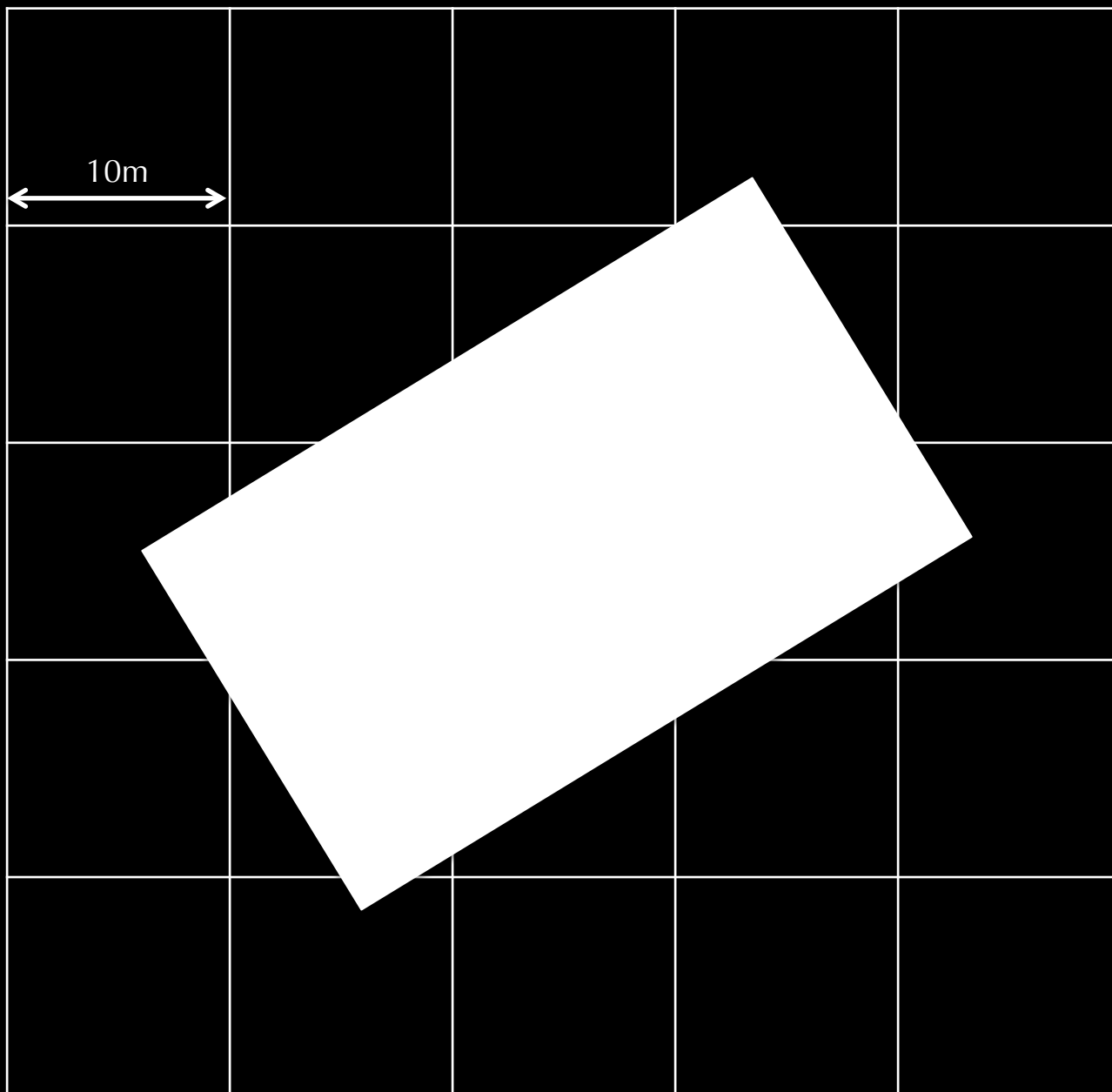


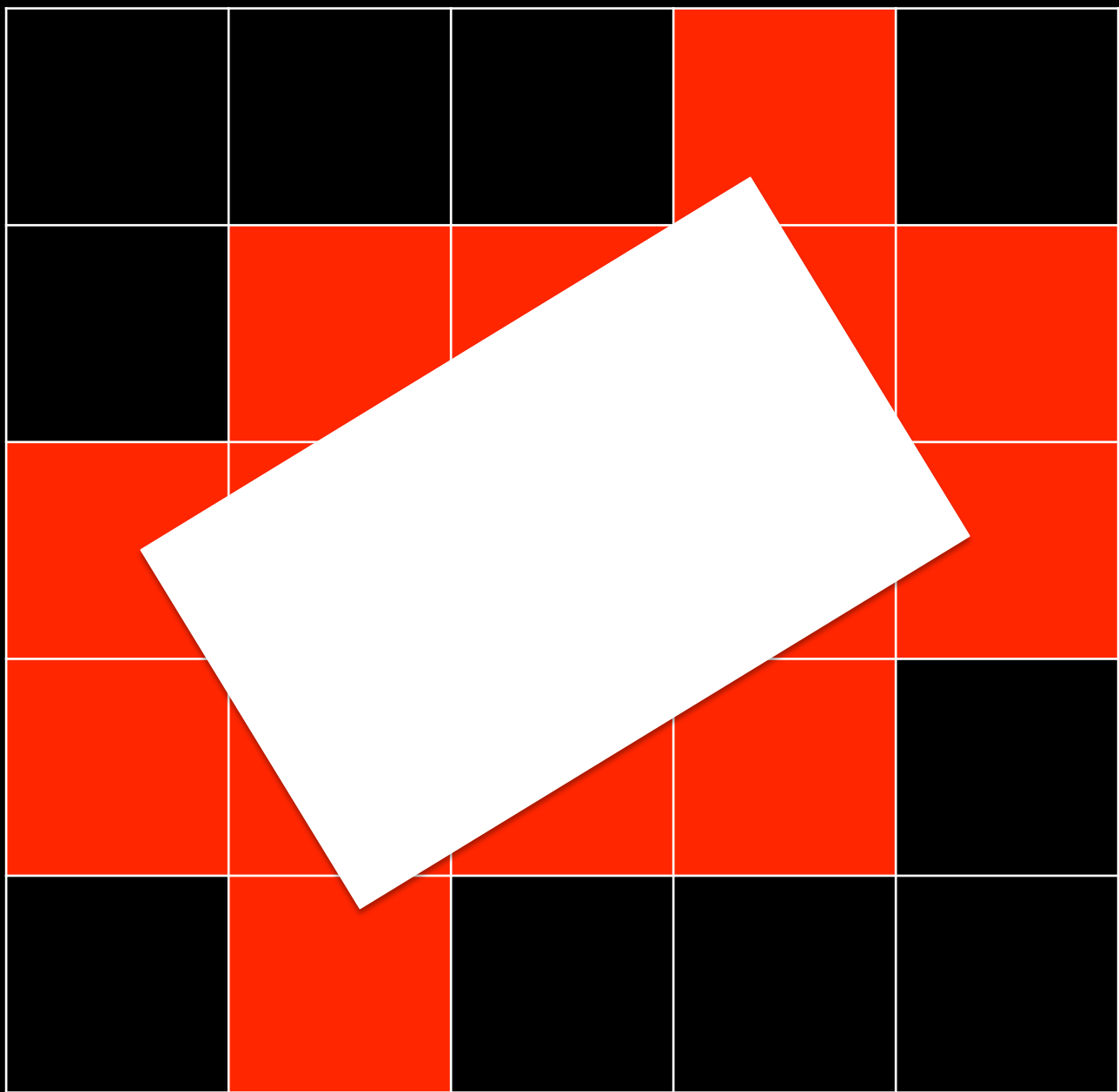
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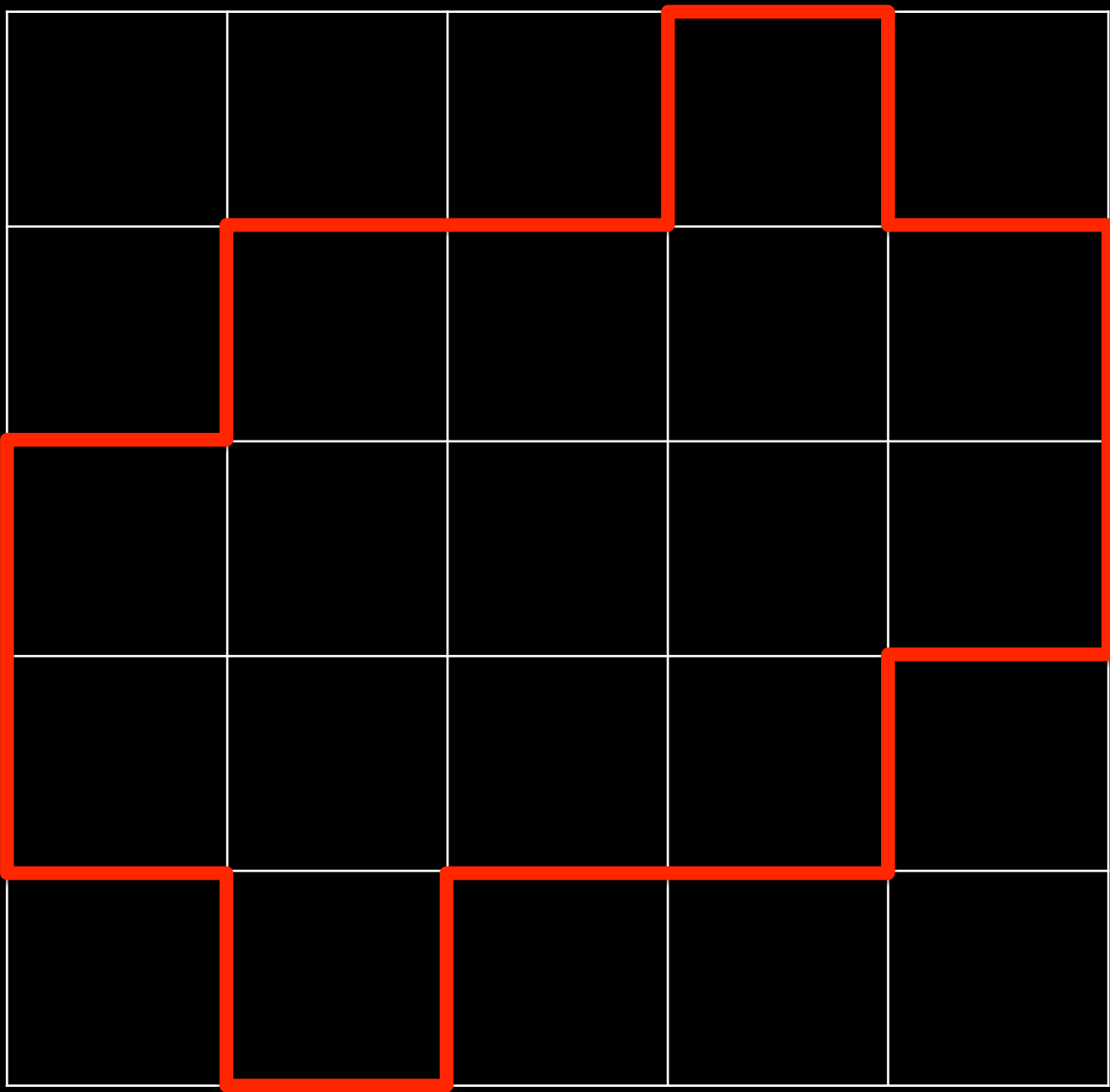
Pac-Man

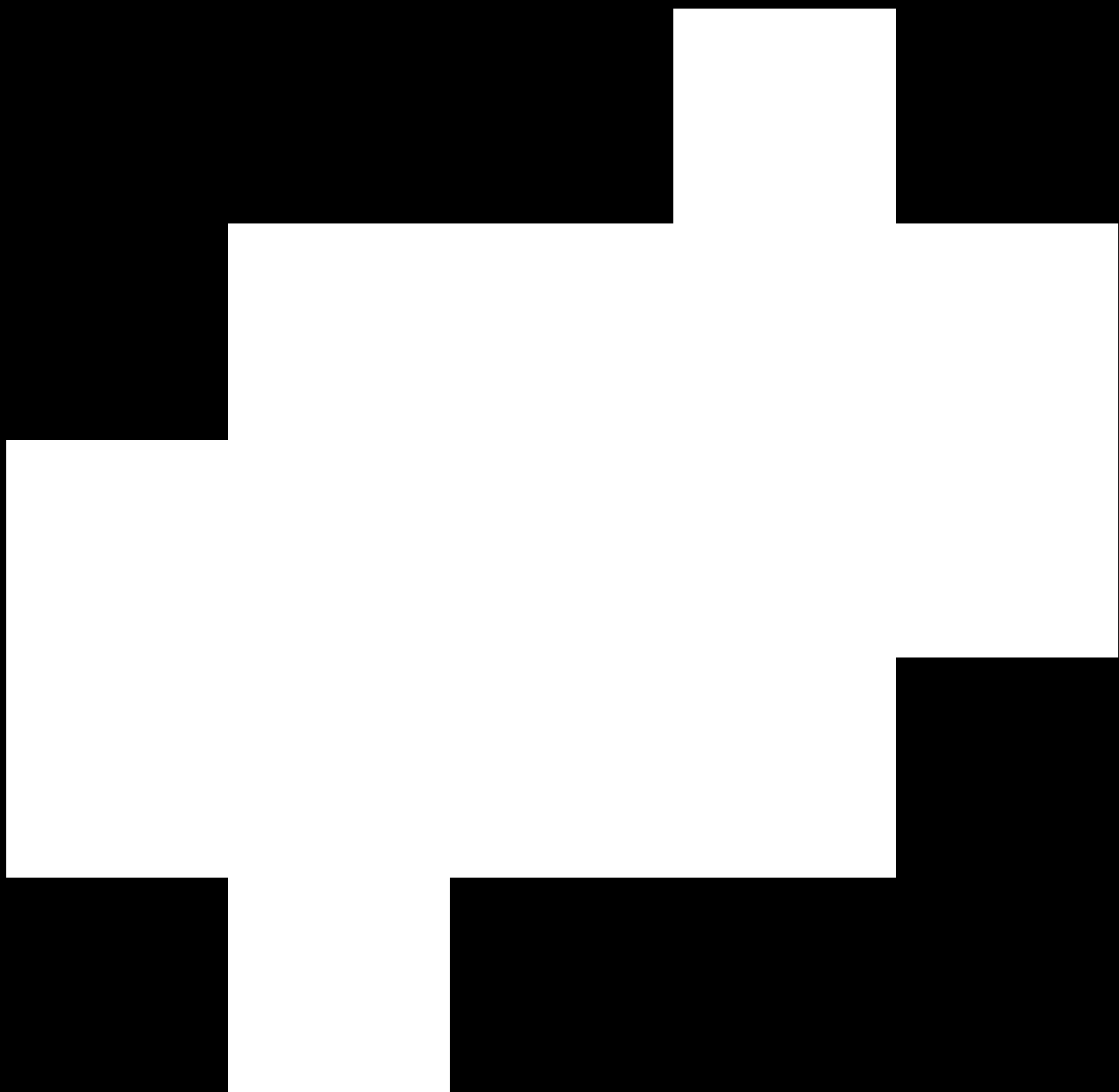


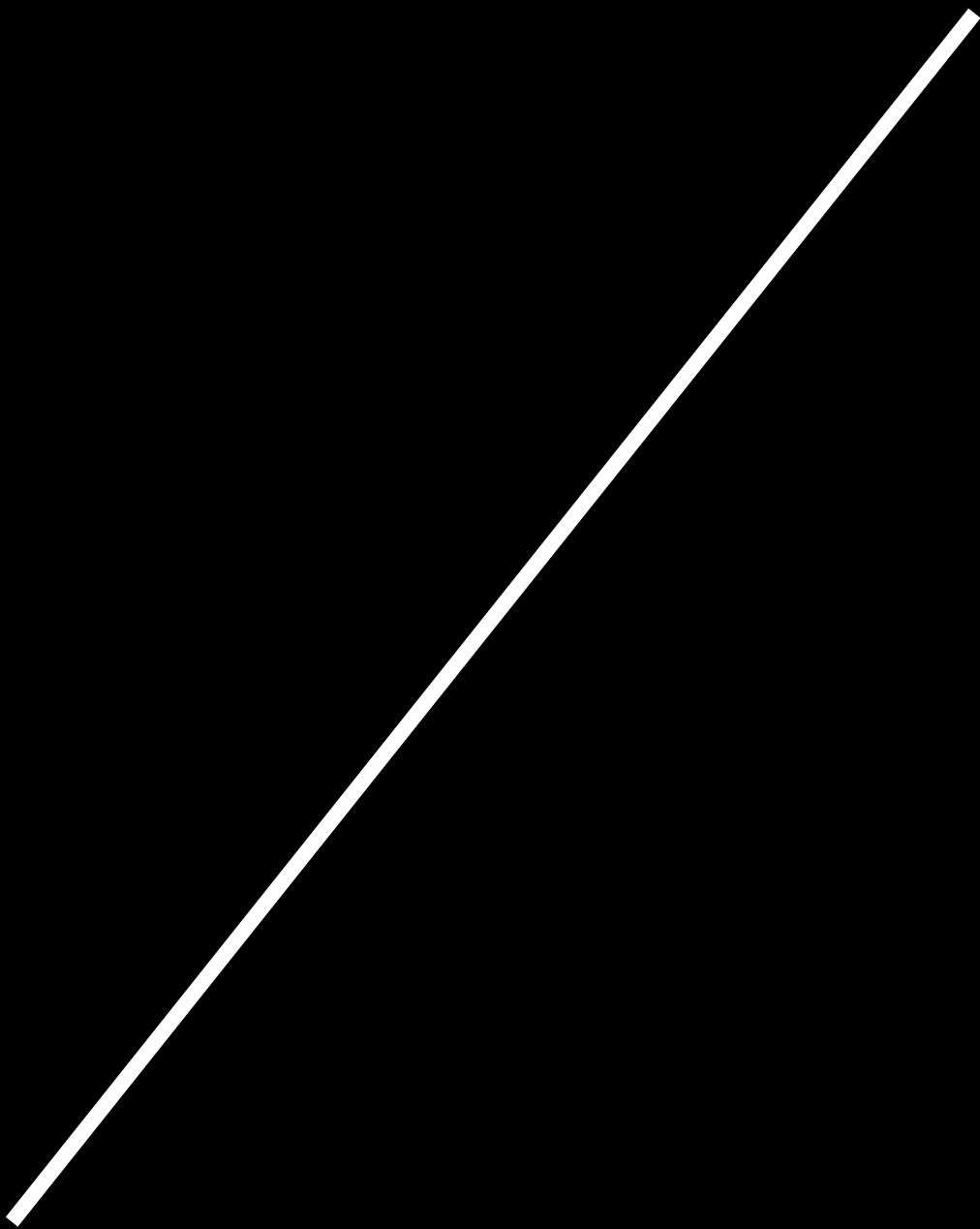


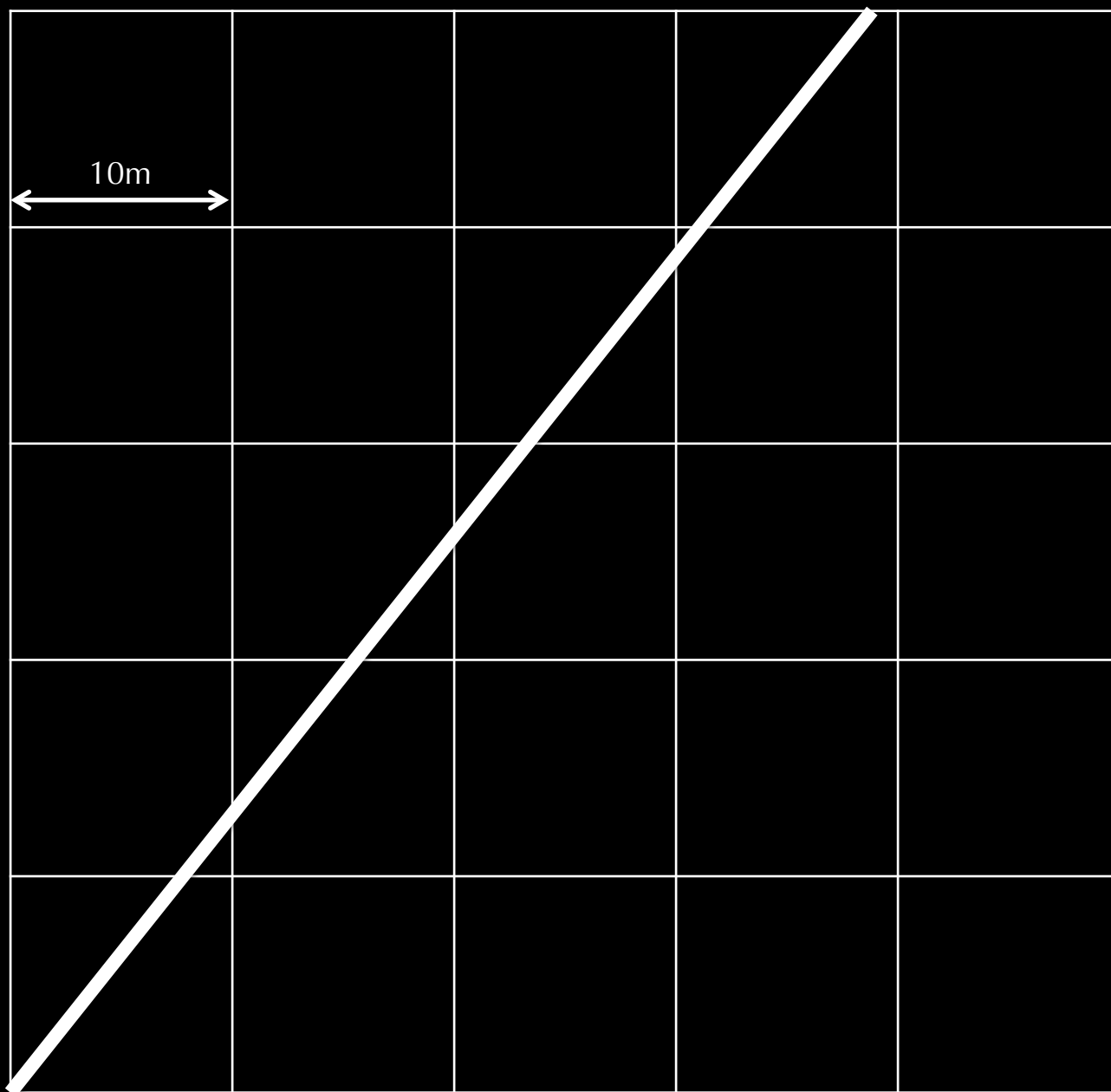


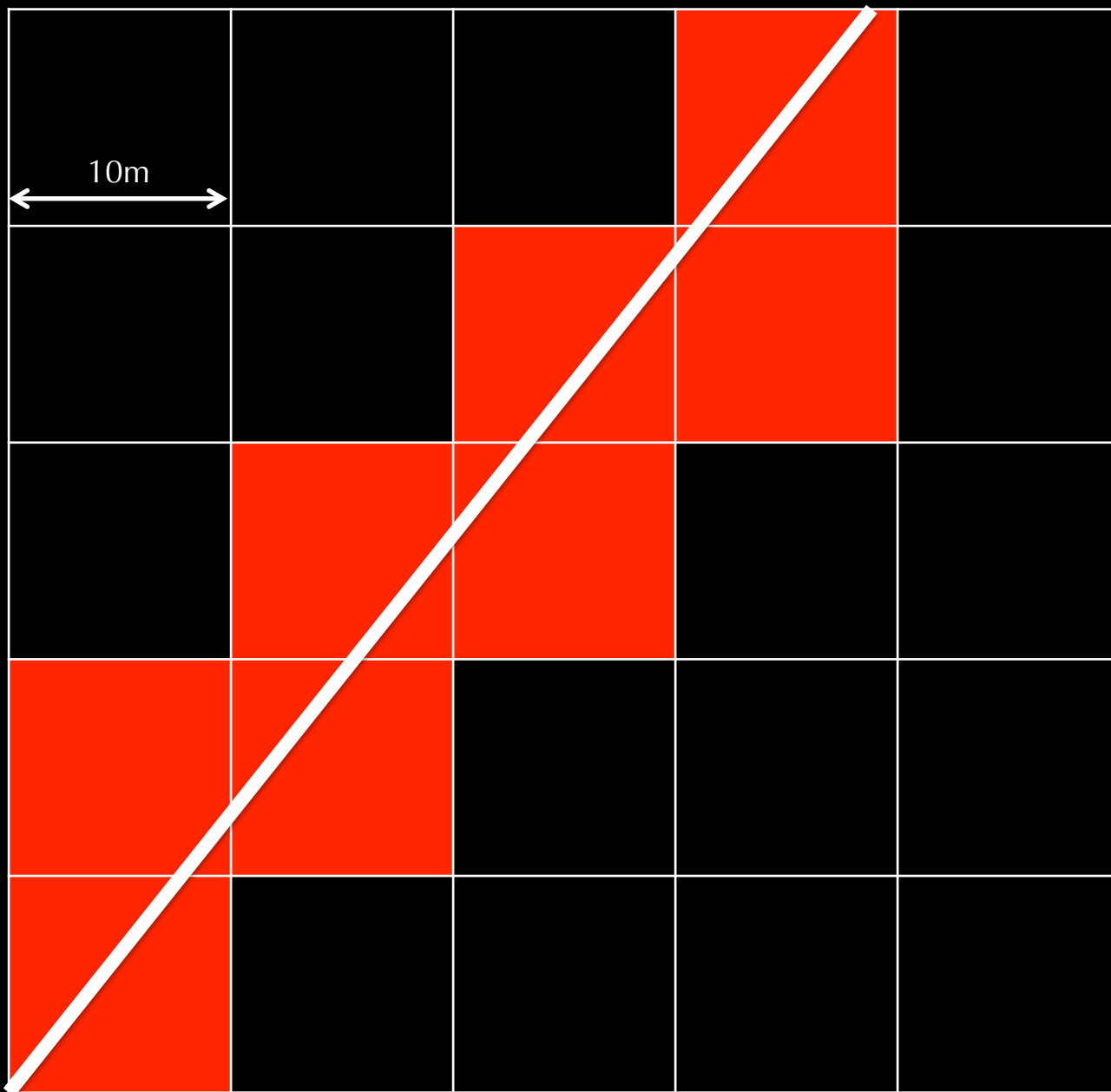


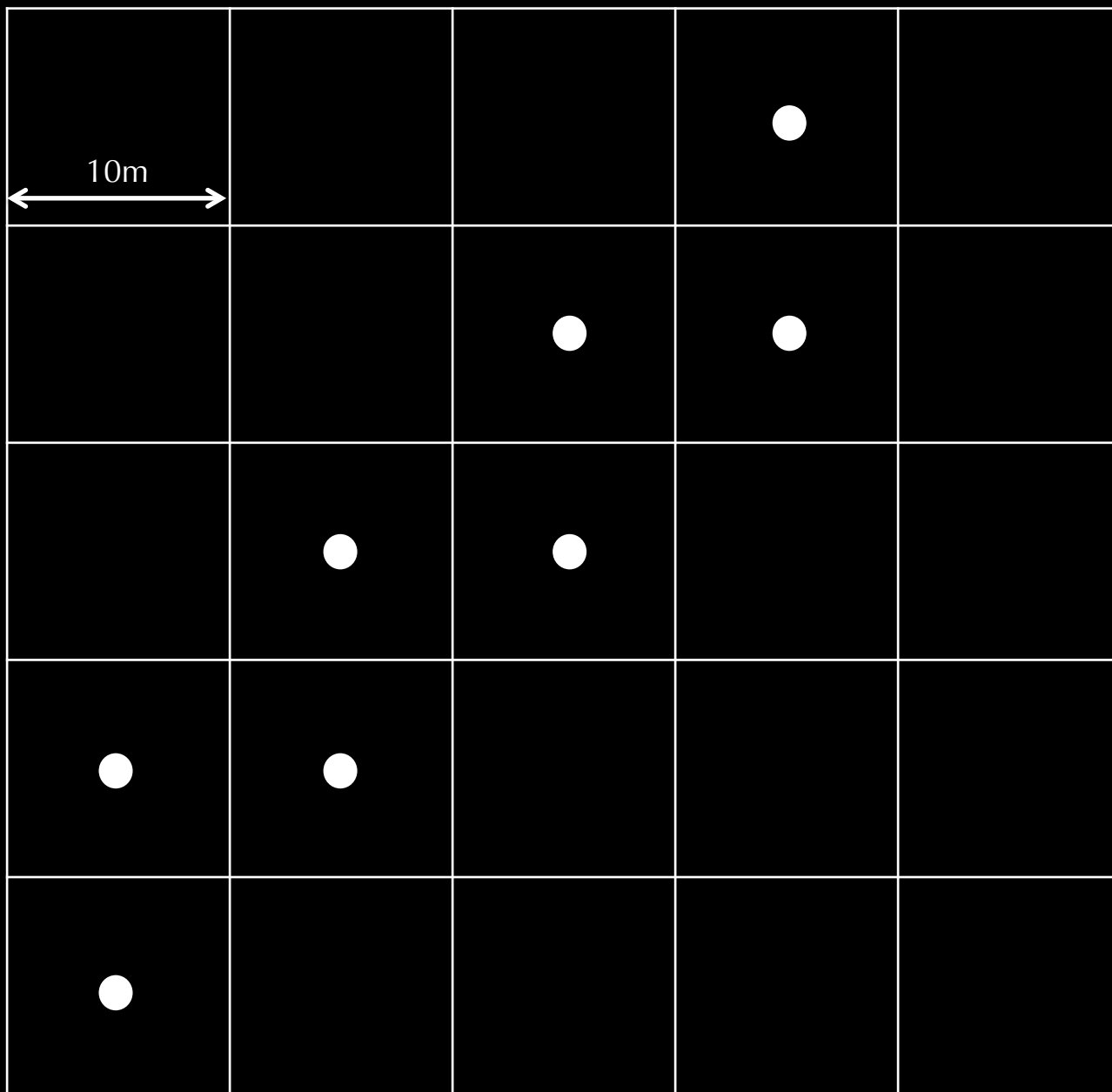


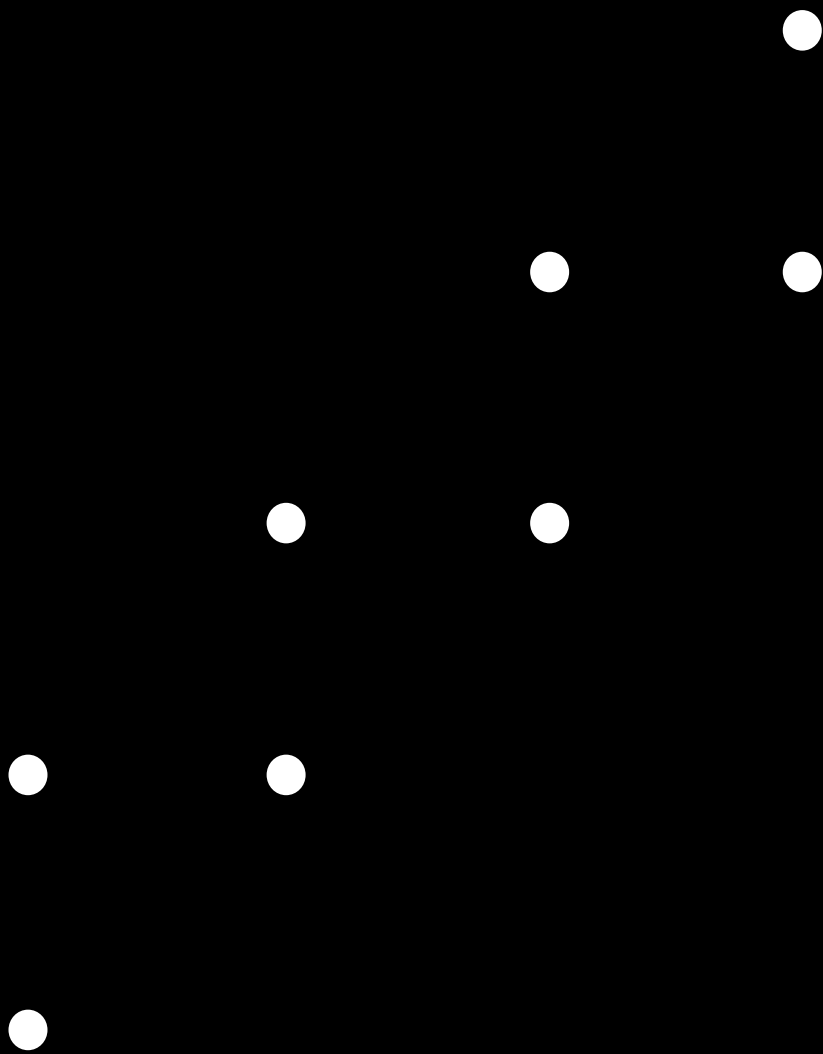




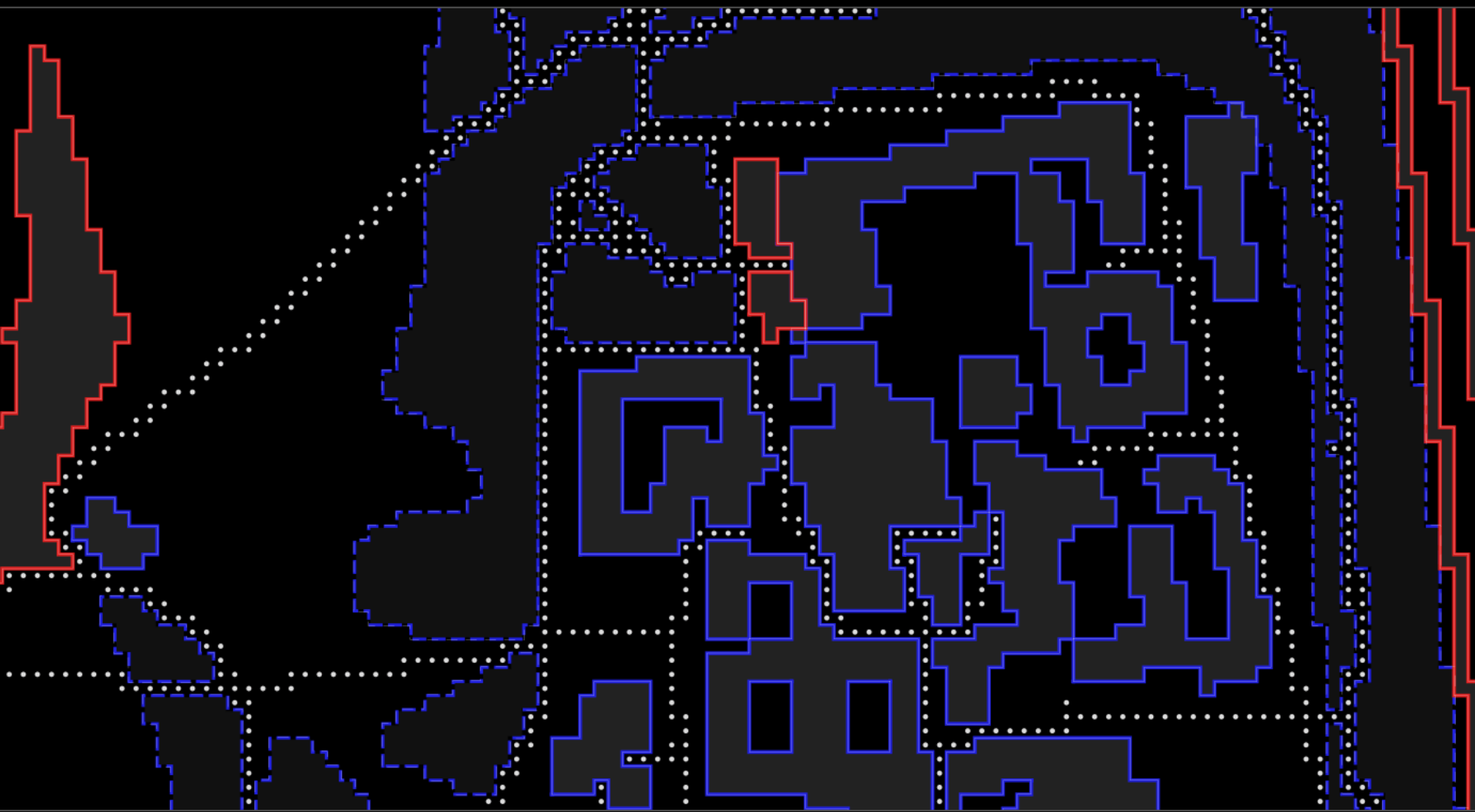








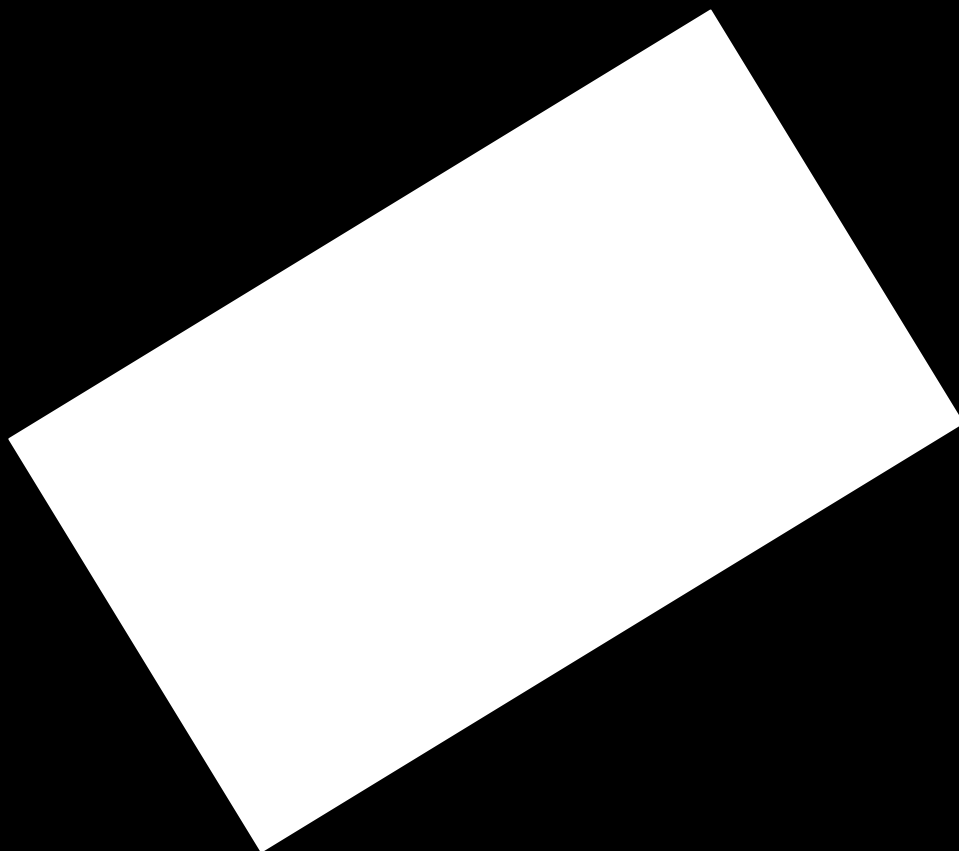
Pac-Man

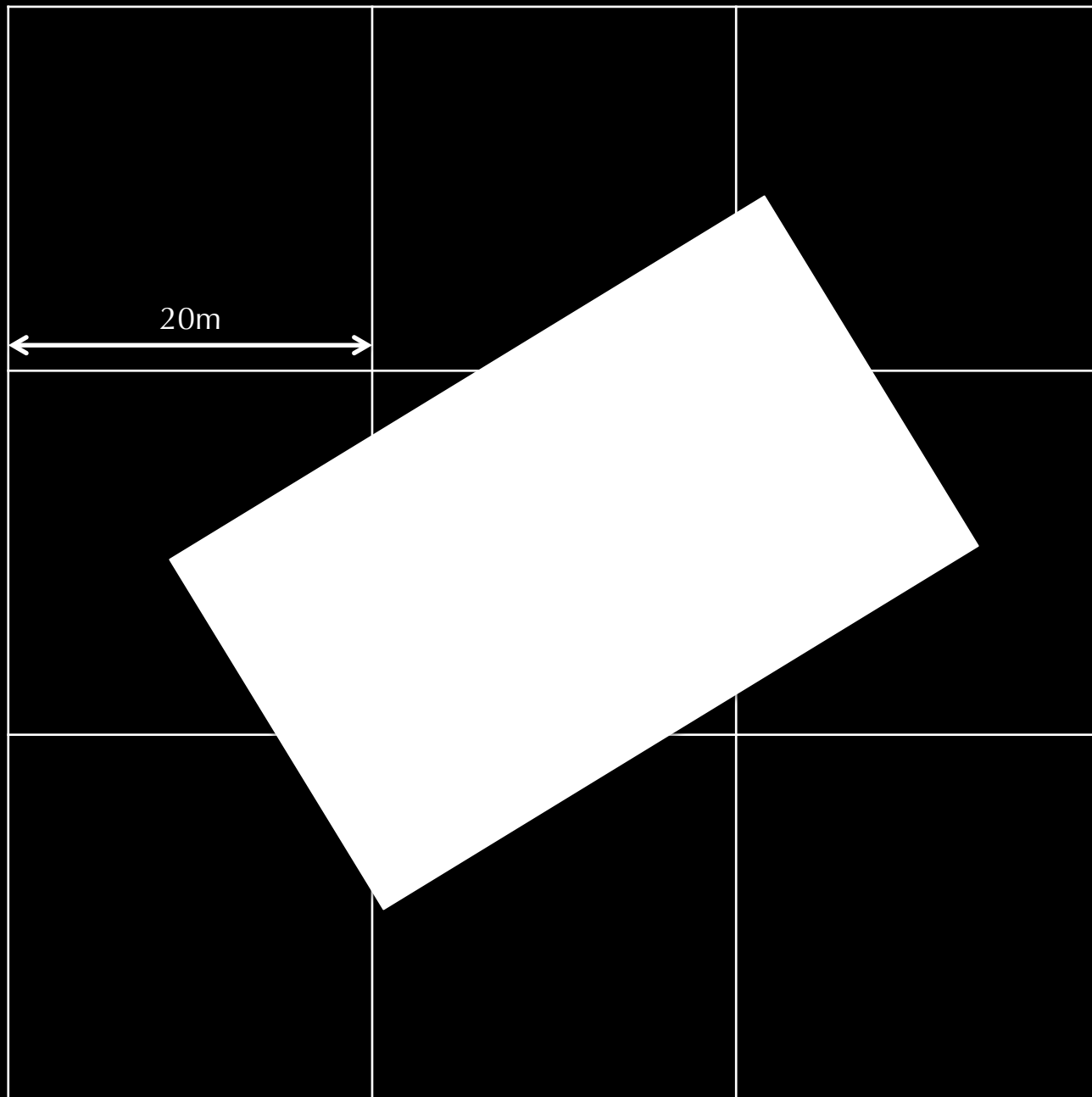


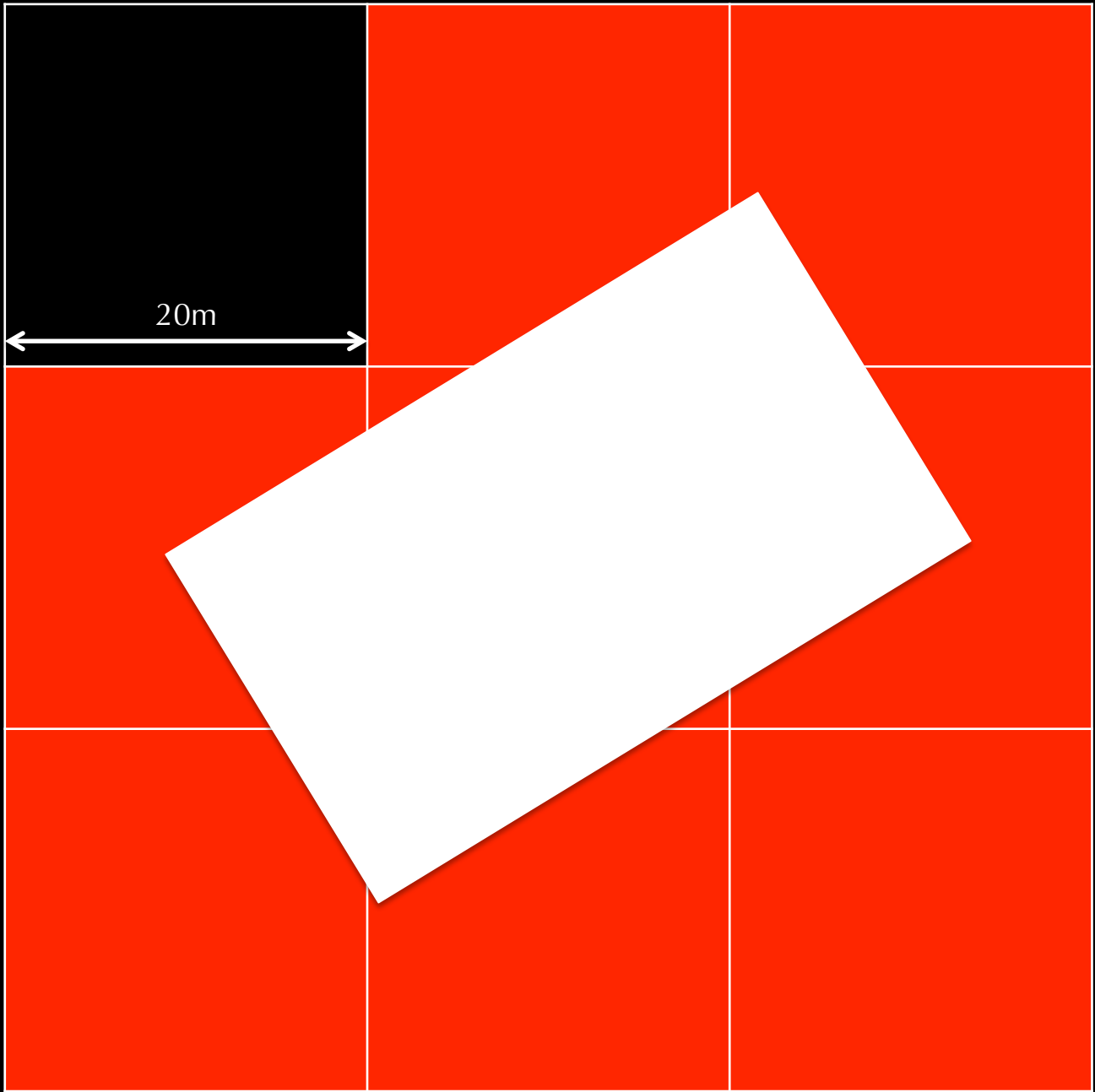
2

RPG-Map









FREELY AVAILABLE TEXTURE MAP TILES



Grass (Background)



Dirt (Paths)



Water (Water)



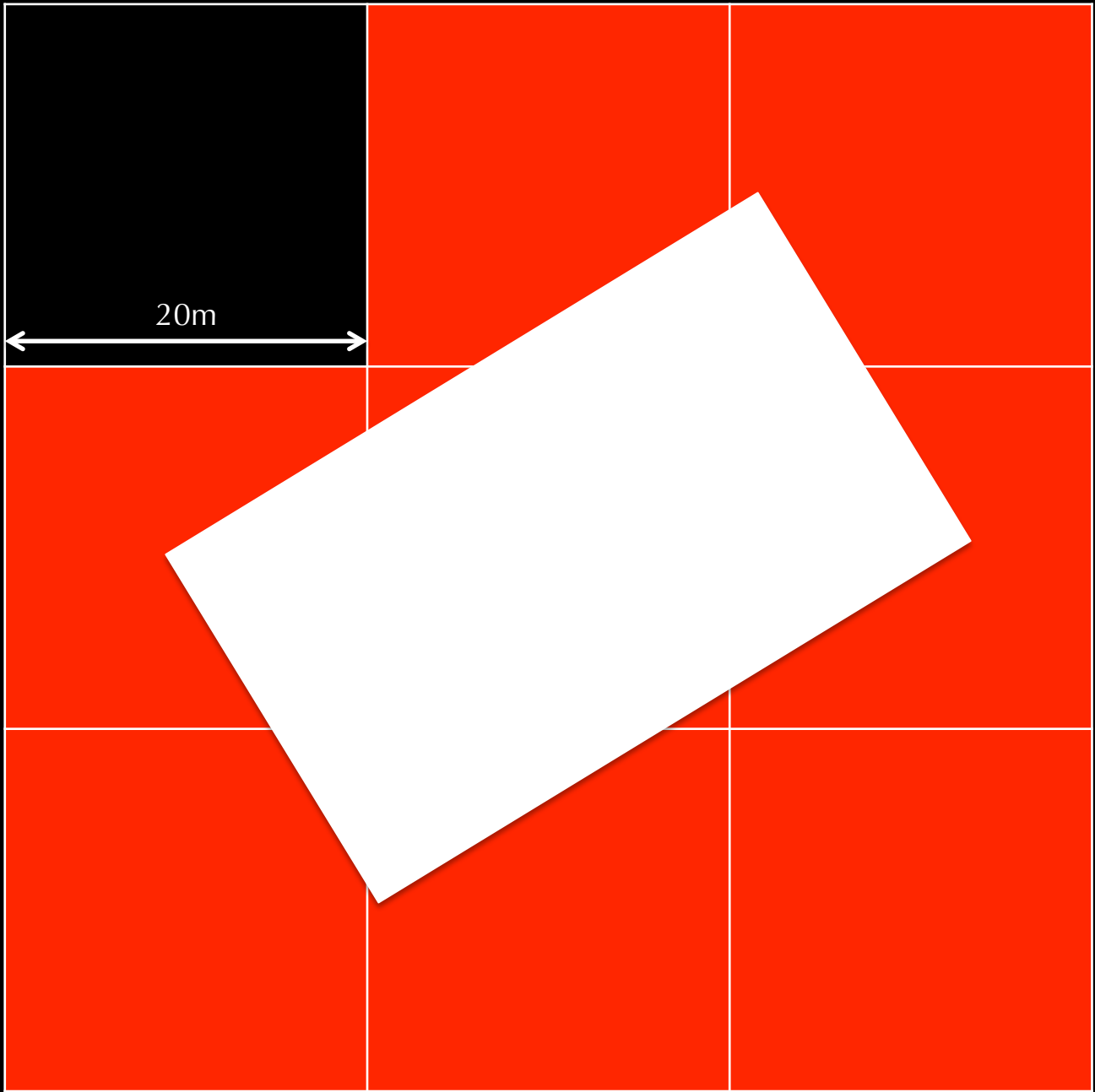
Stone (Buildings)

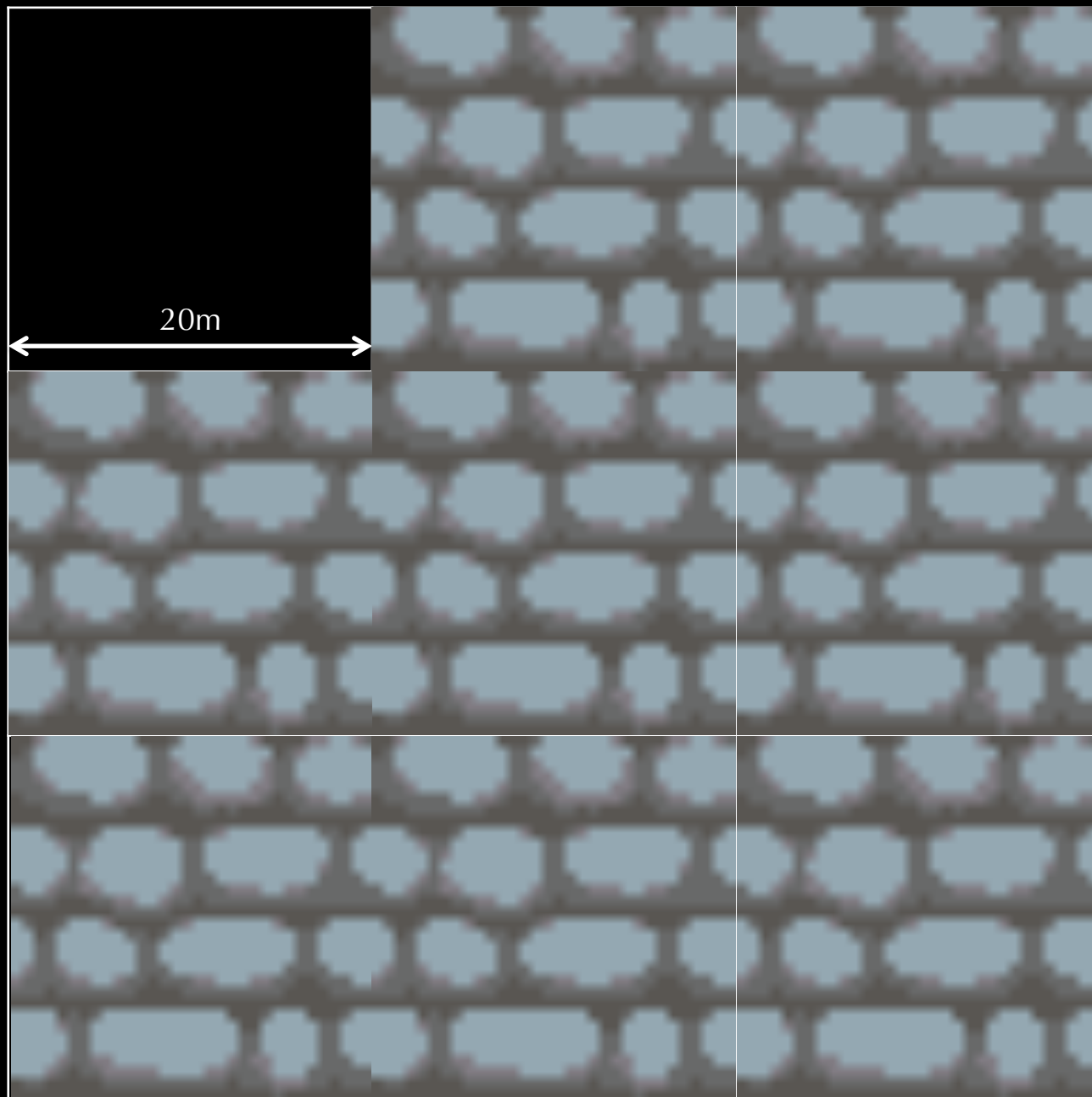


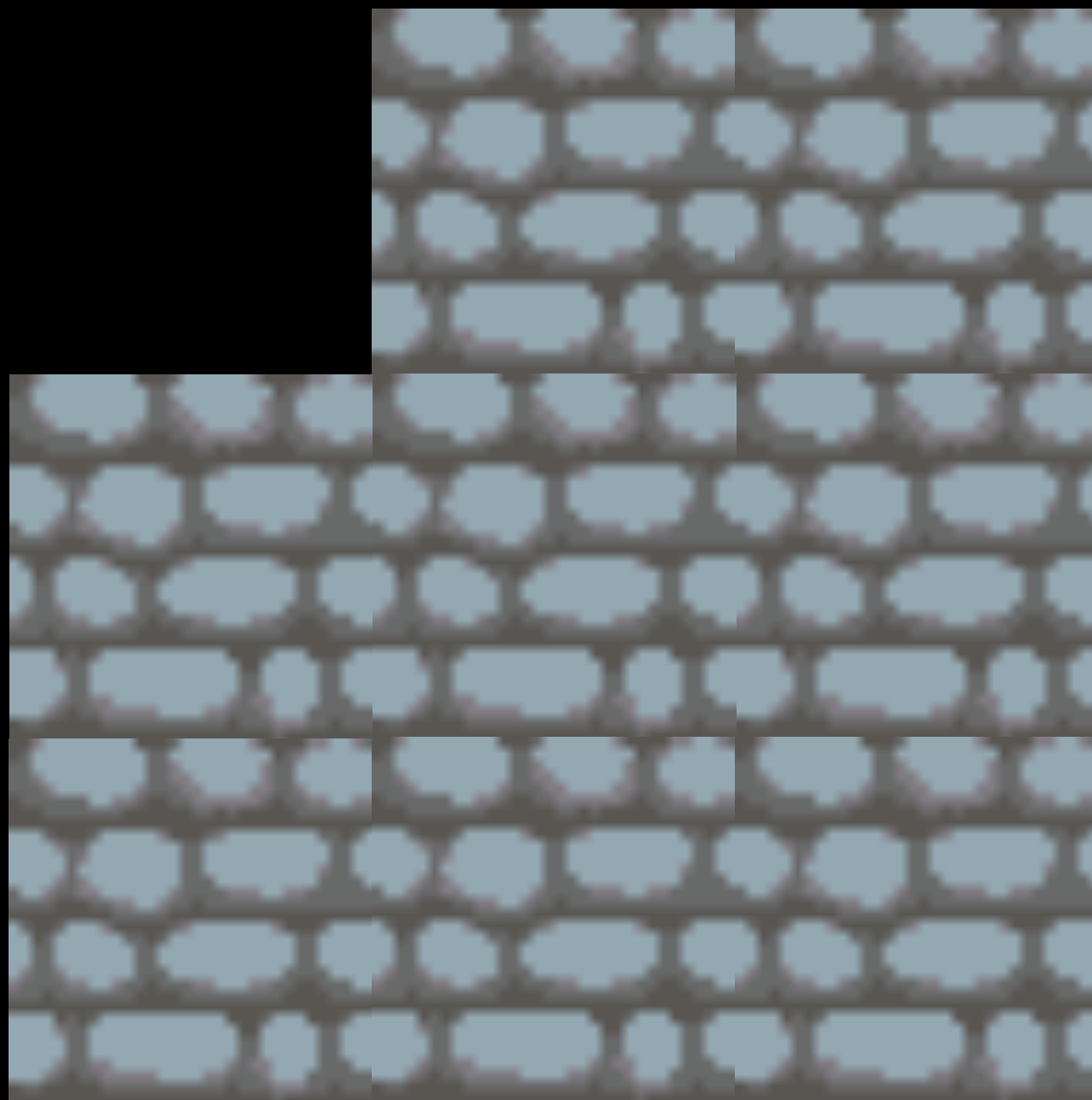
Lava (Hazards)



Tree (er, Trees...)





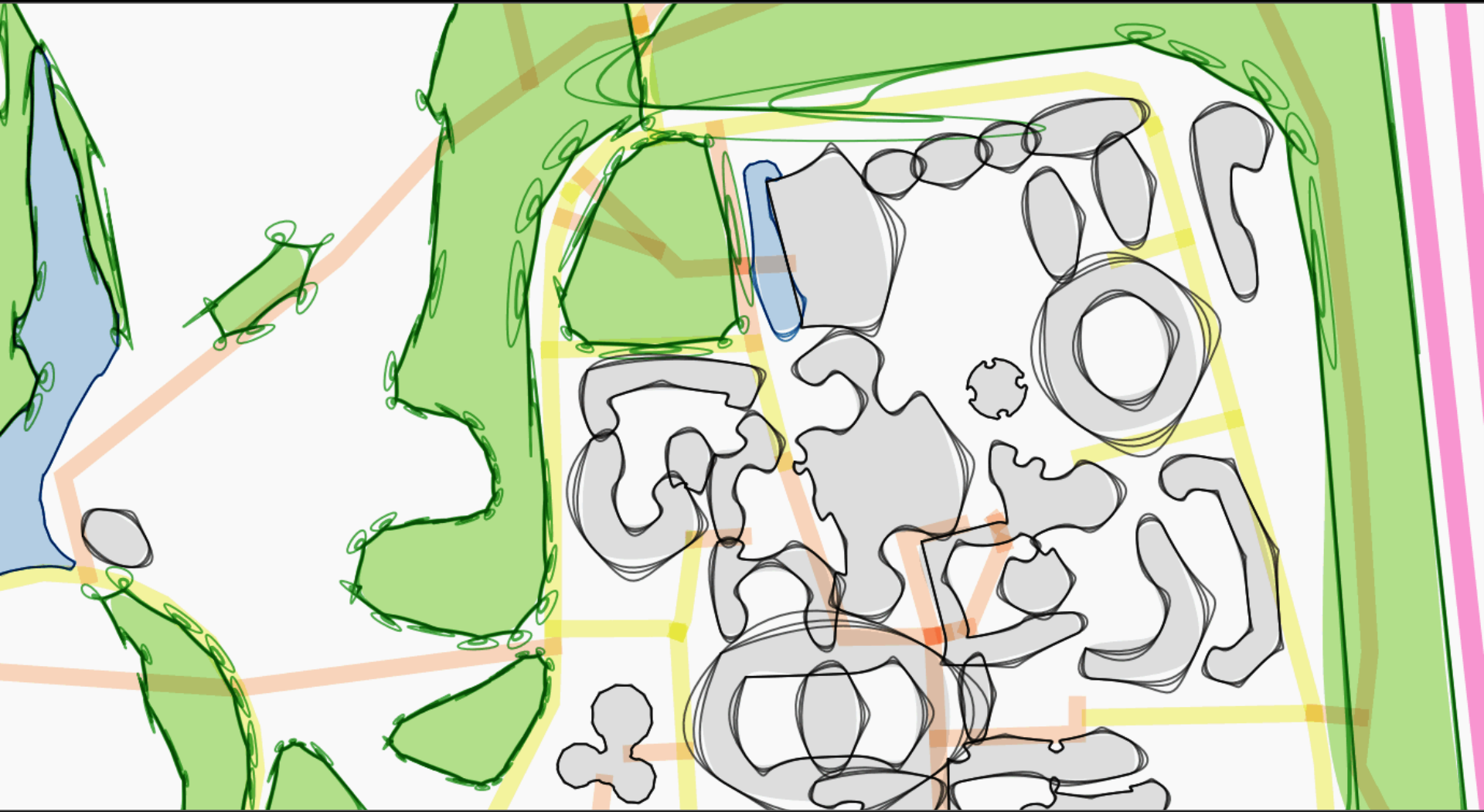


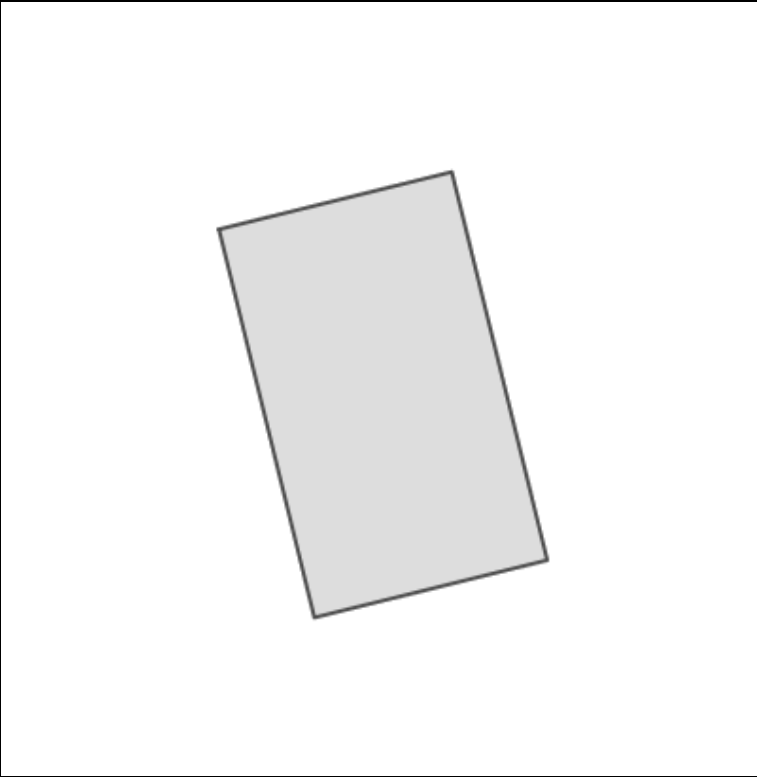
RPG-Map

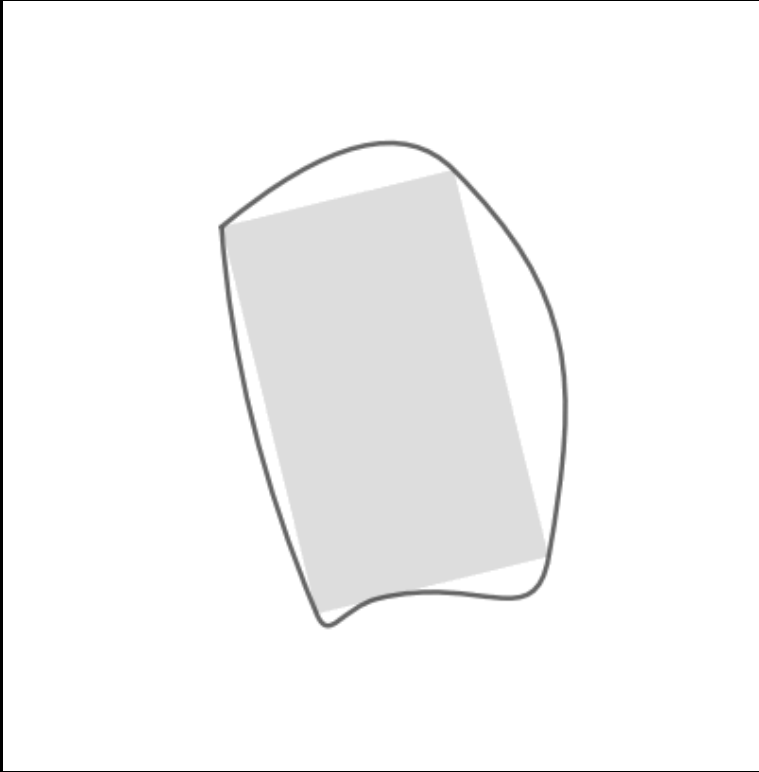


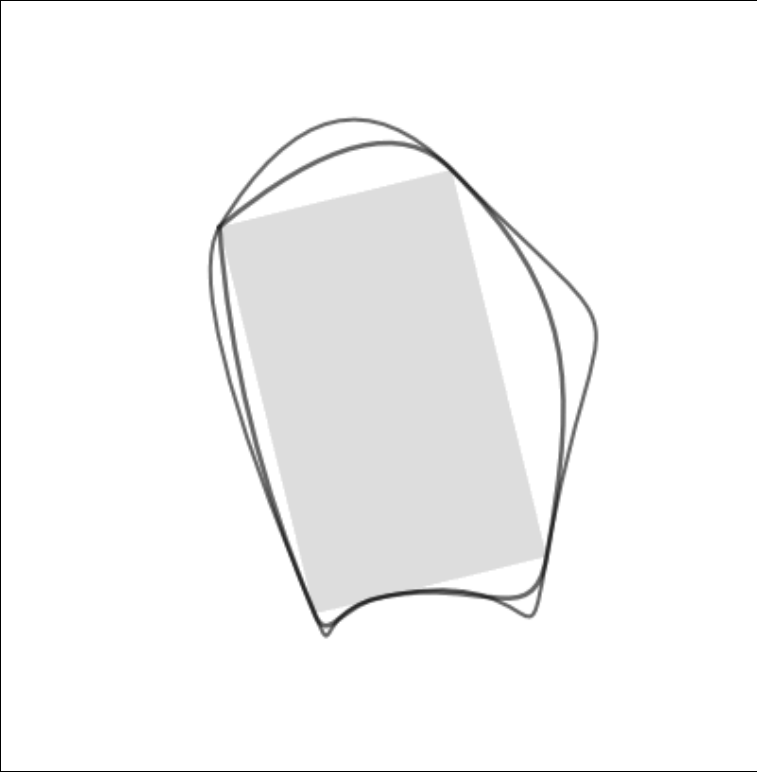
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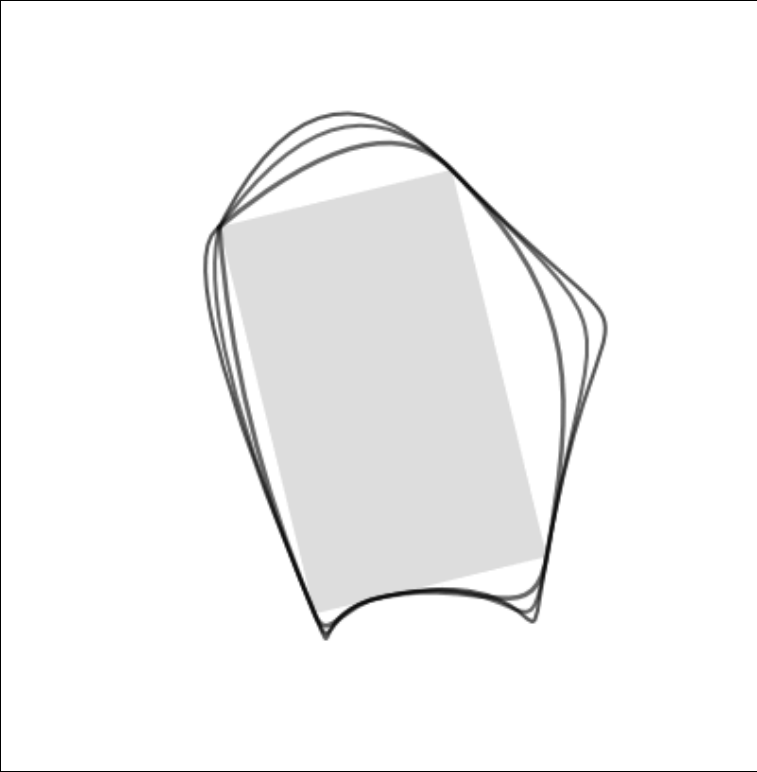
Sketchy Map

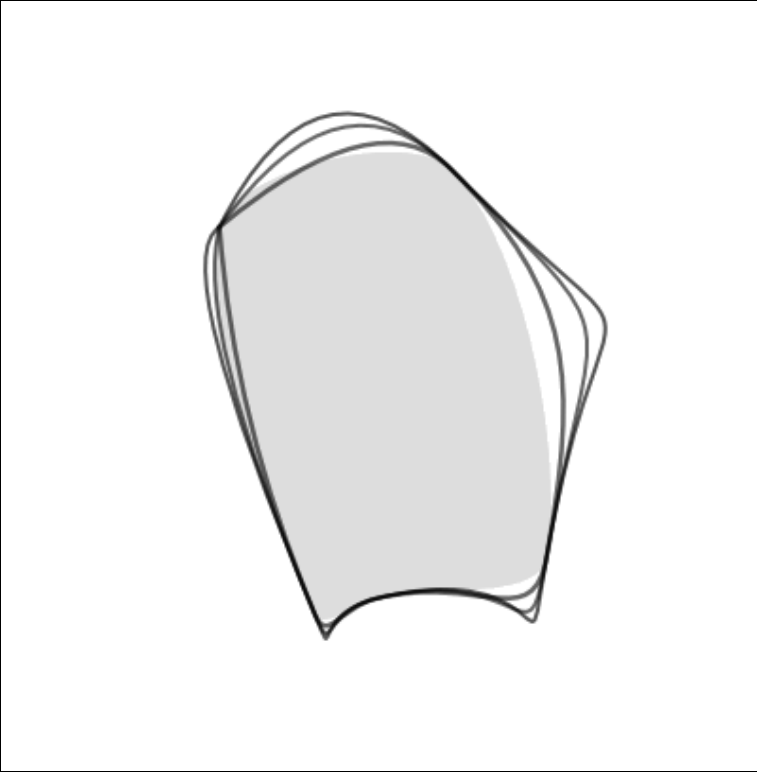




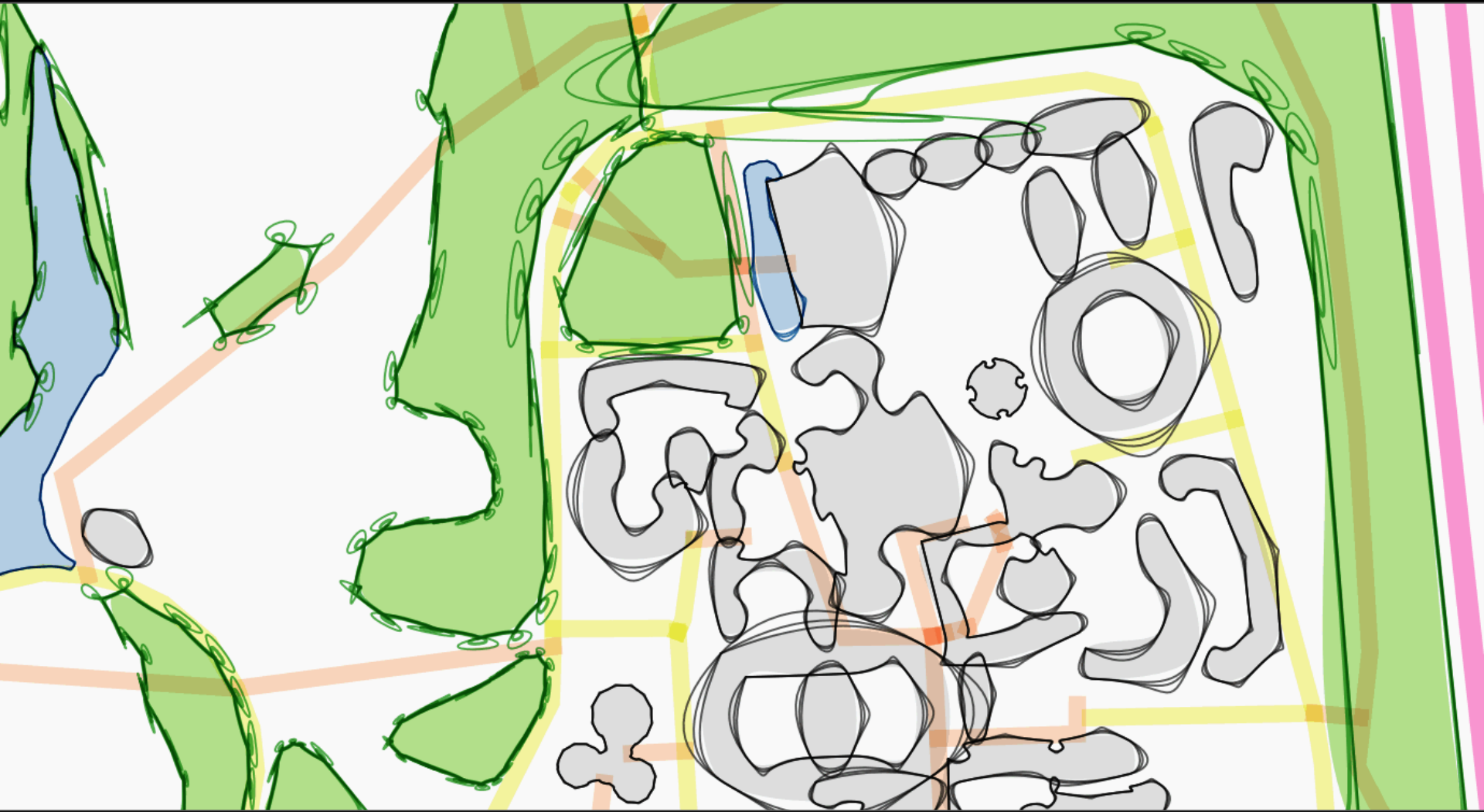






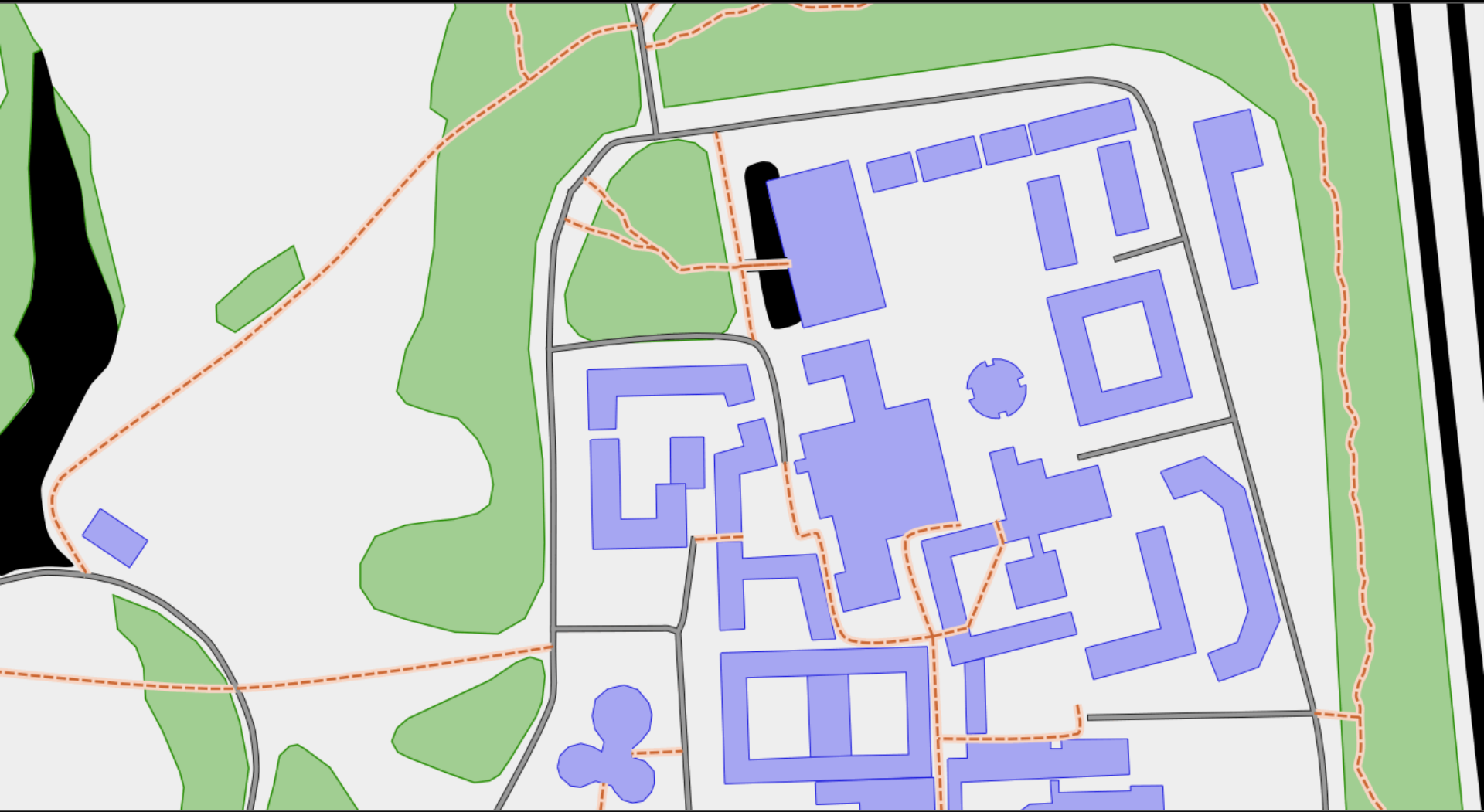


Sketchy Map



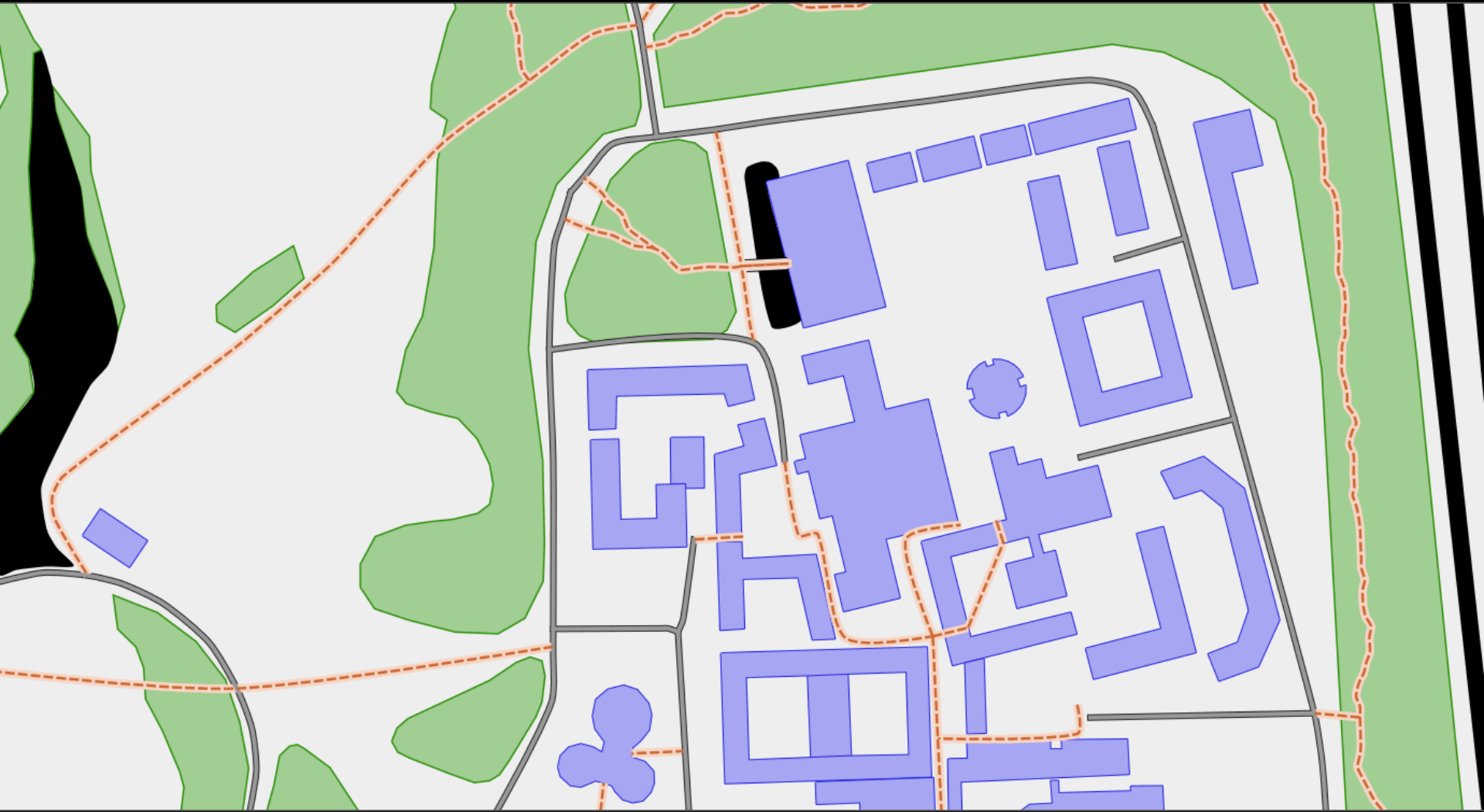
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Anti-Glare Map

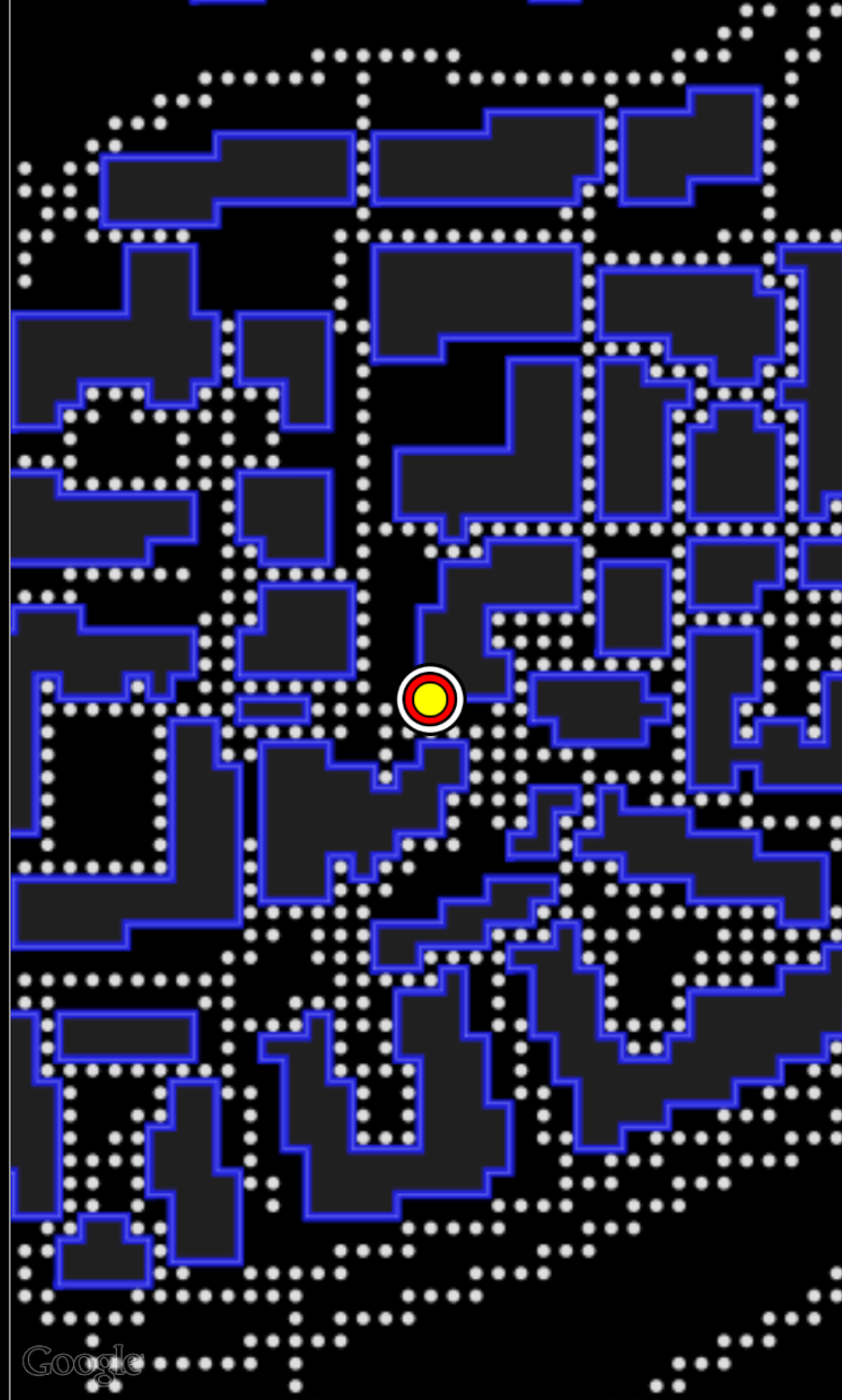




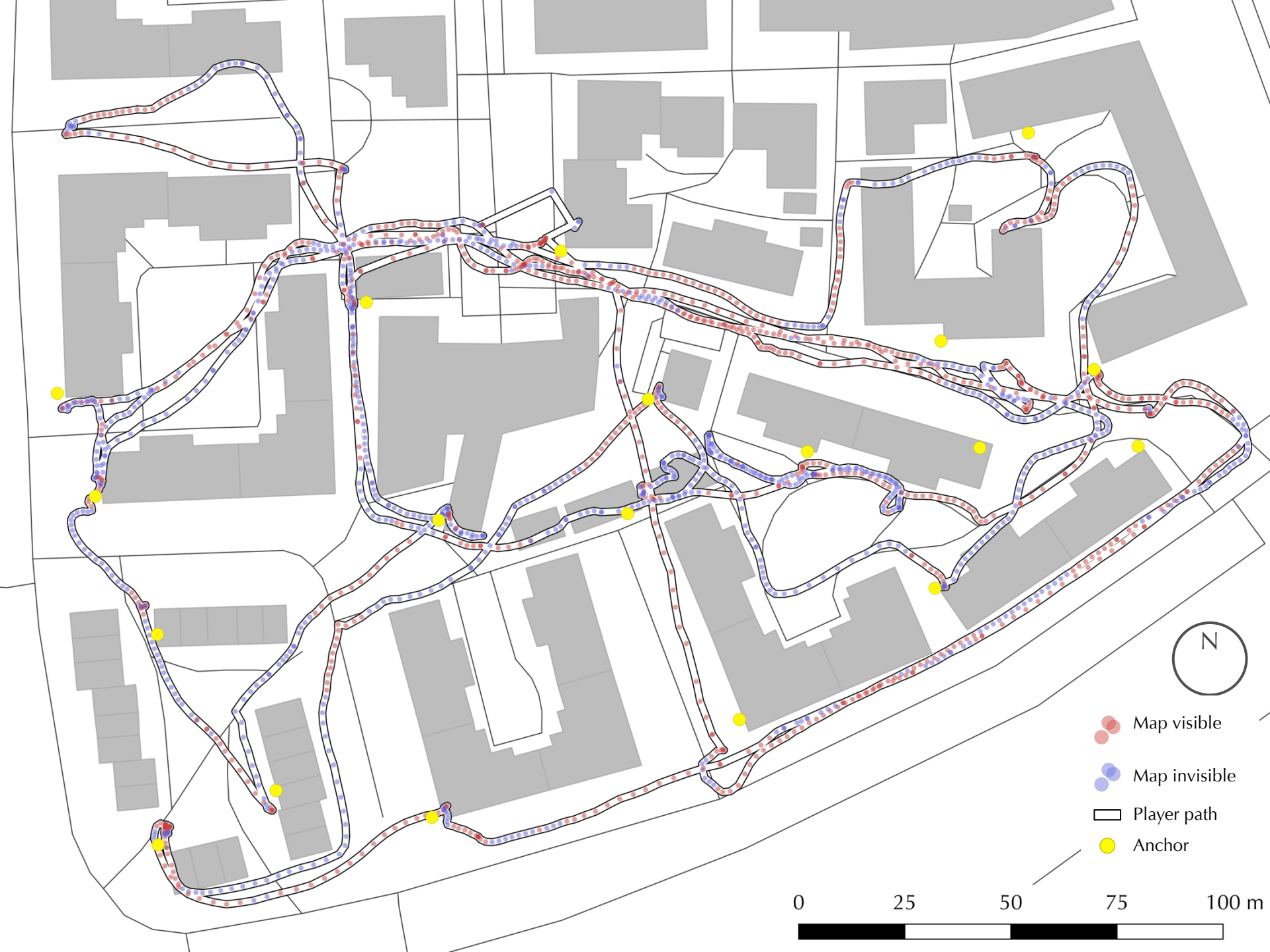
Anti-Glare Map

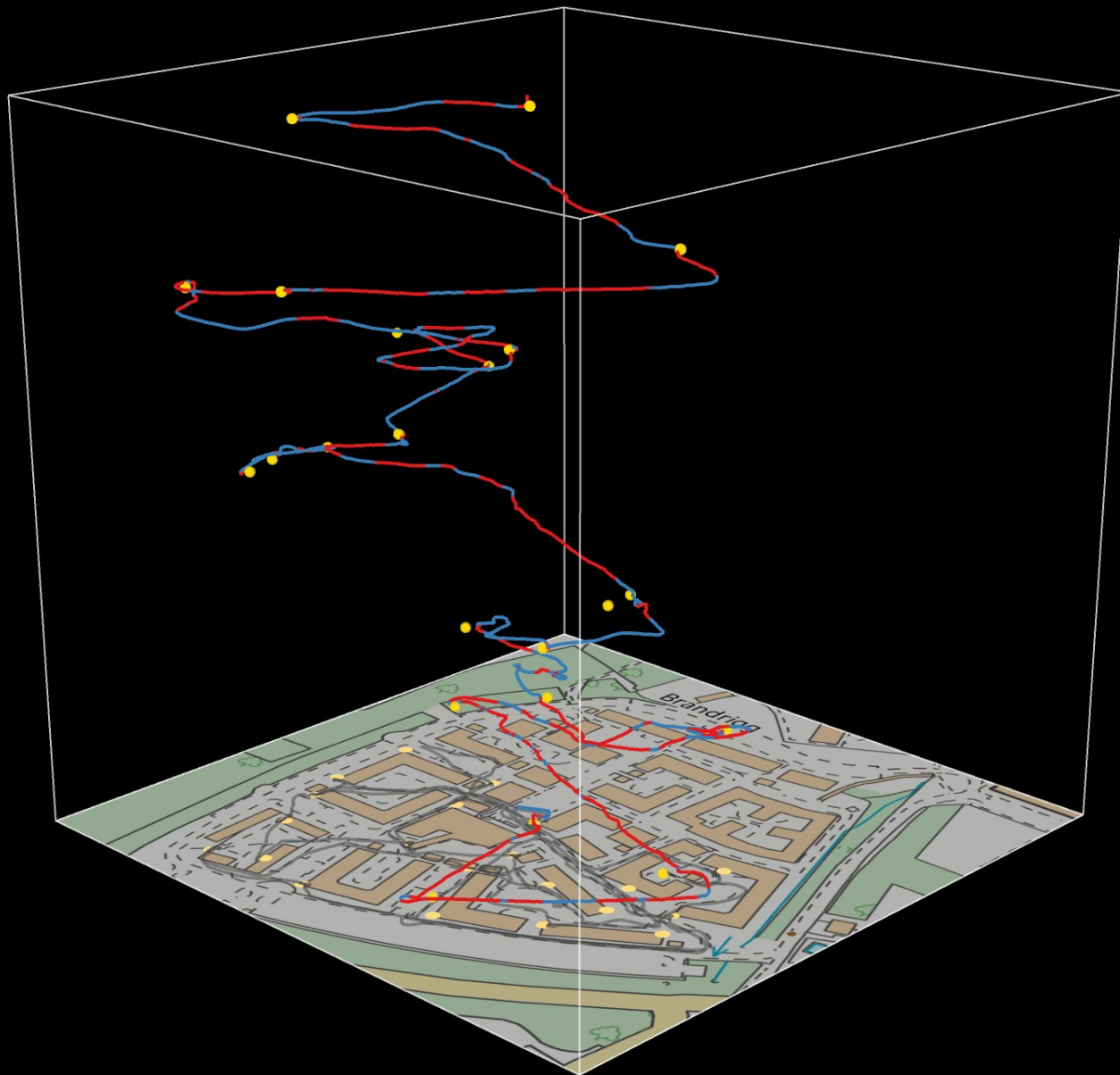


Test

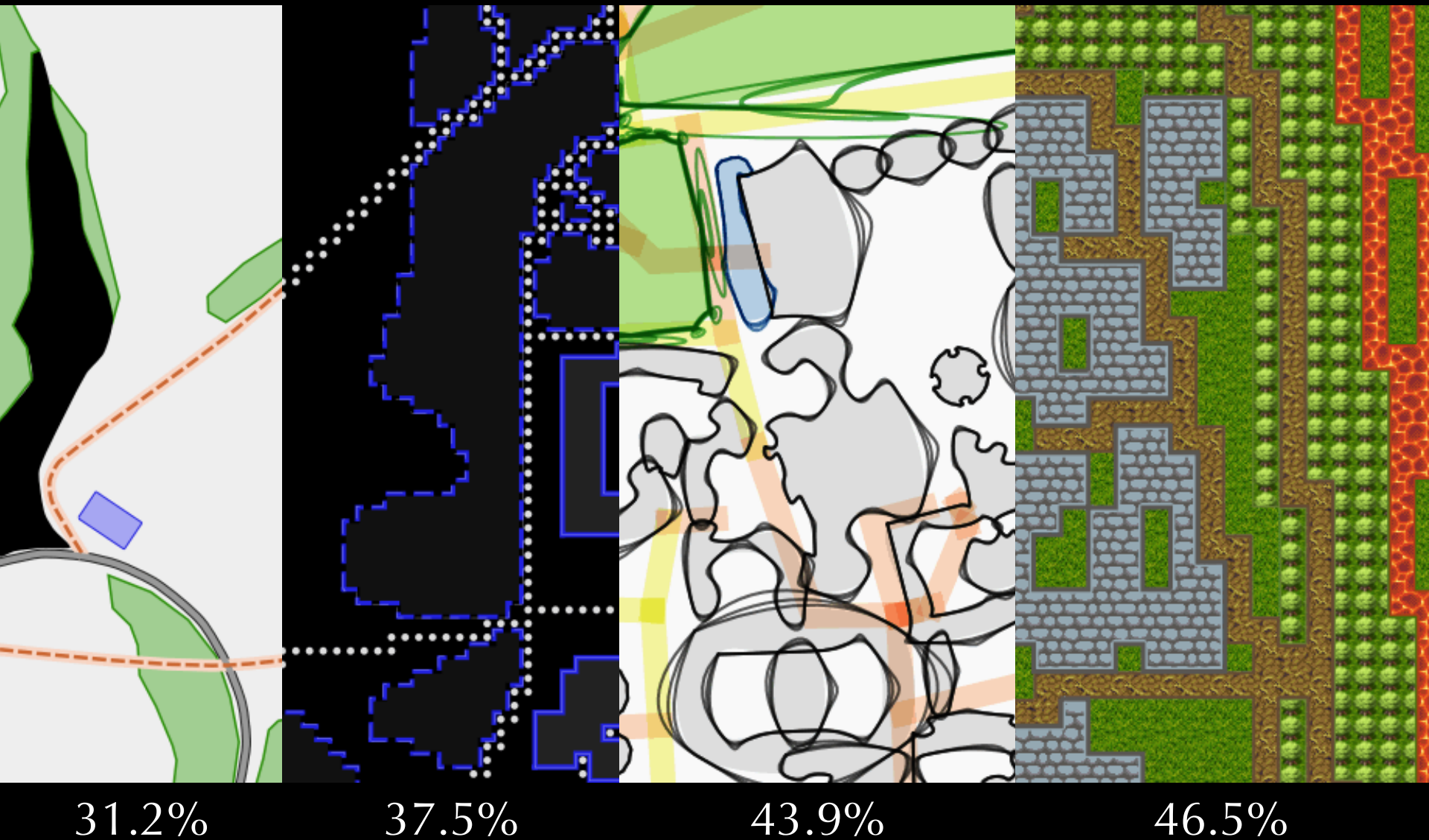








Actual Time Spent Looking at the Map



BUT

“Little need to look around”

“*Easy* to read”

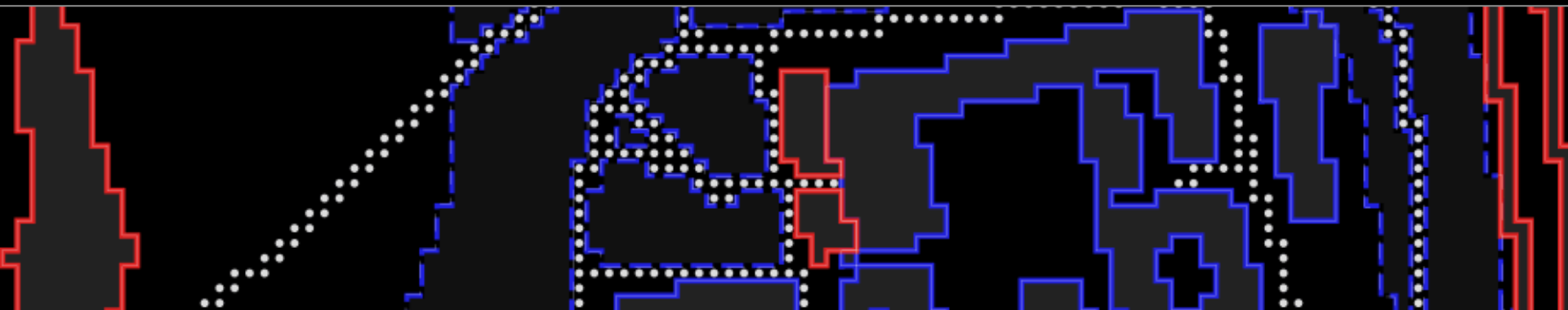
“Too *easy*”



“Best suited to a game”

“Right level of difficulty”

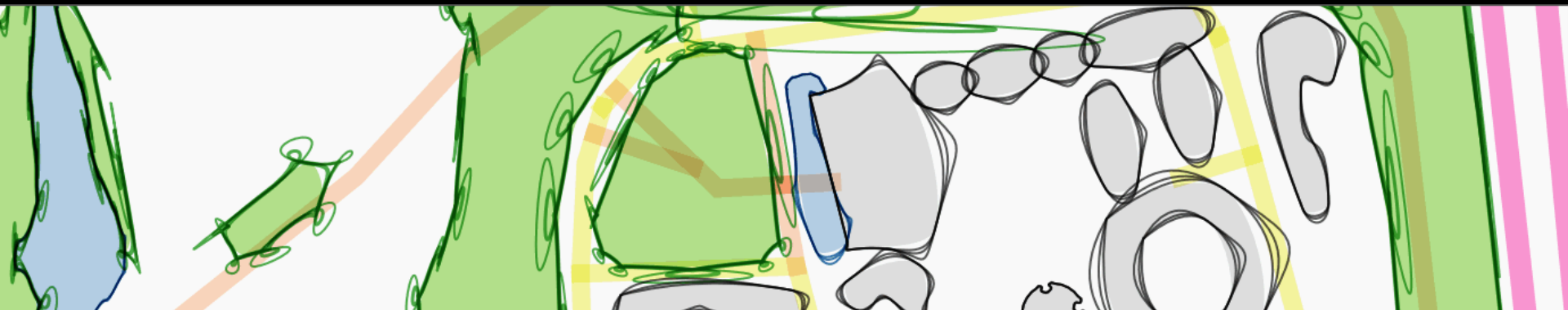
“Made me **look up** often”



“Did not need to stare at the
map”

“Challenging enough to keep it
interesting”

“Pleasing on the eye”



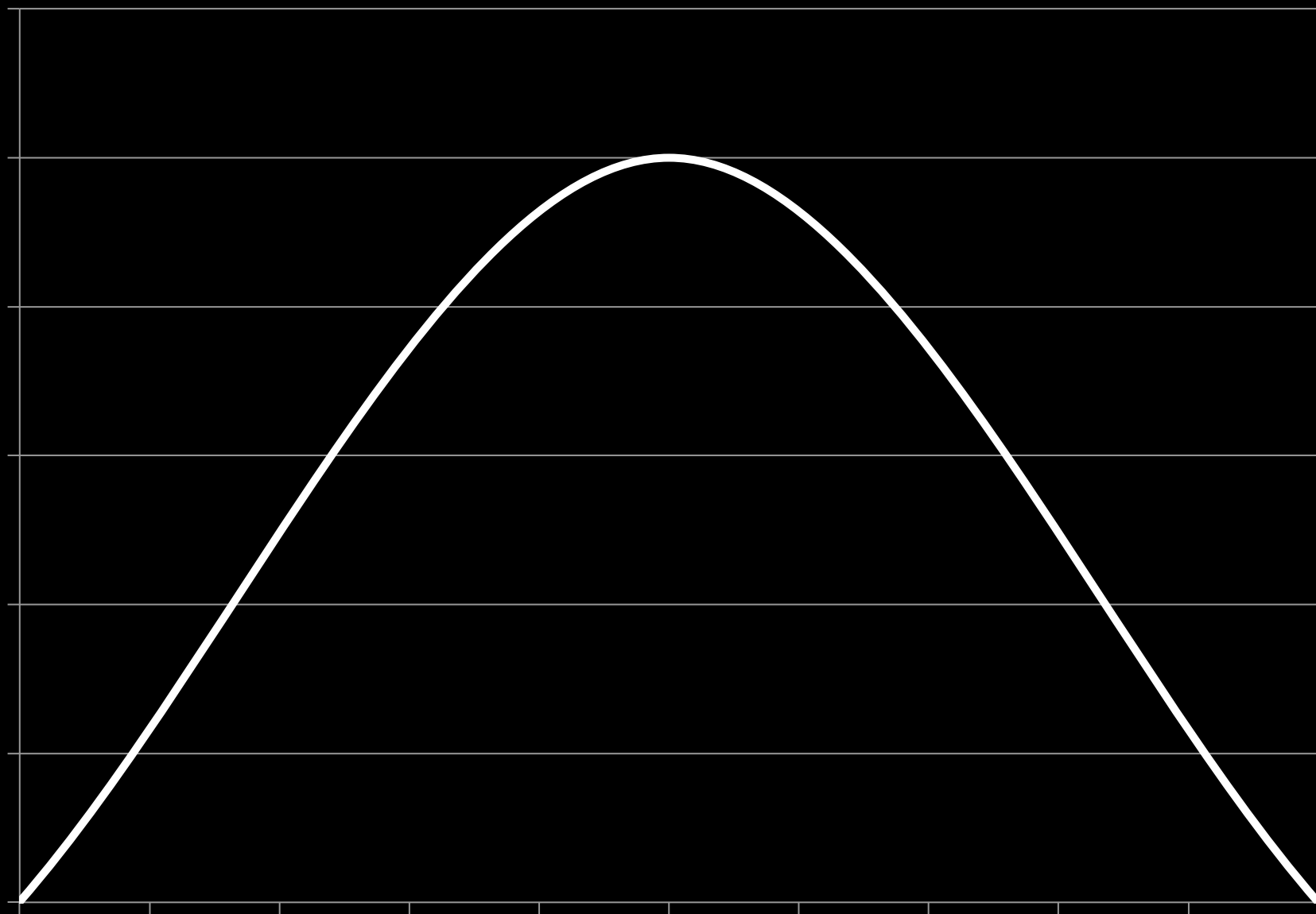
“Very hard”

“Frustrating”

“HORRIBLE. UNUSABLE.”

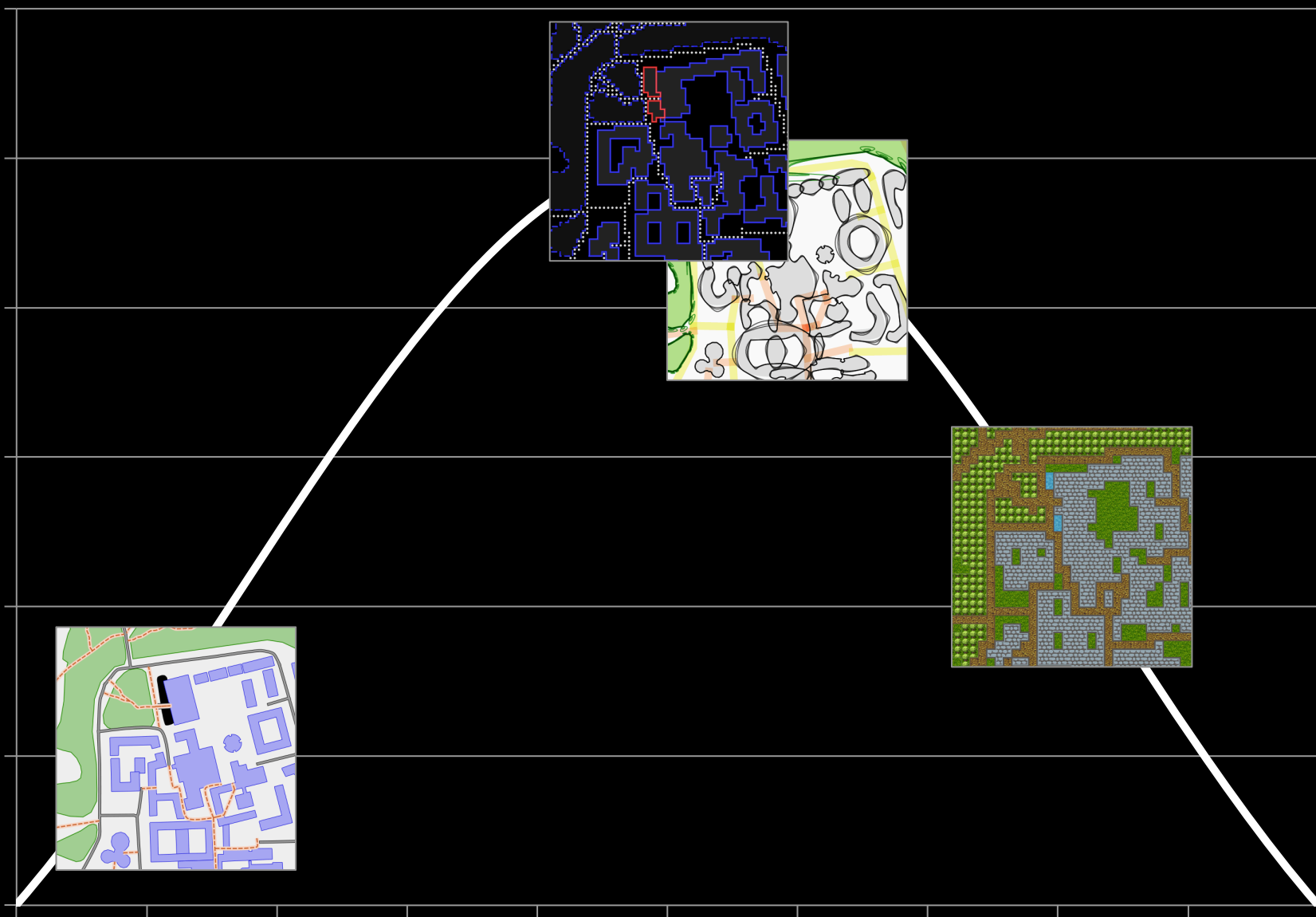


Interaction with Surroundings



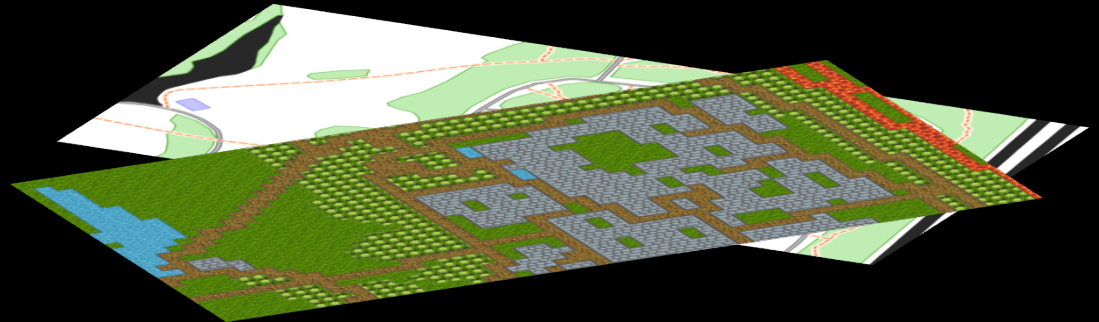
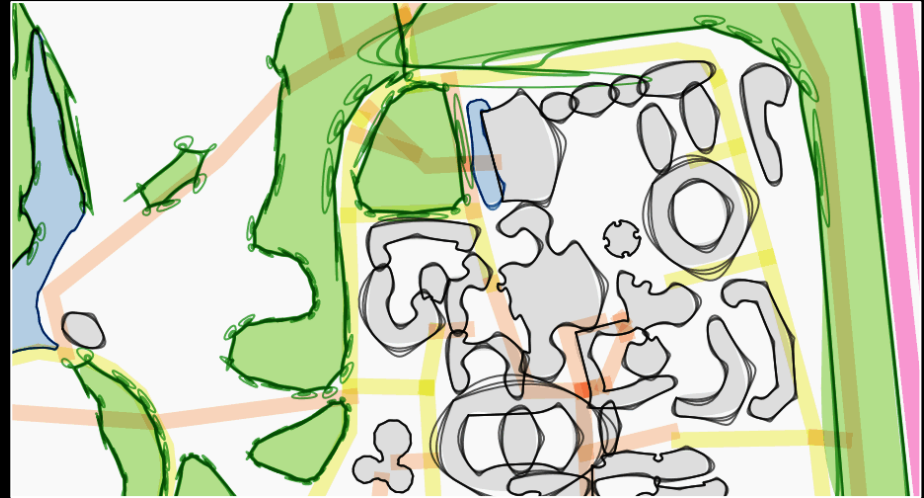
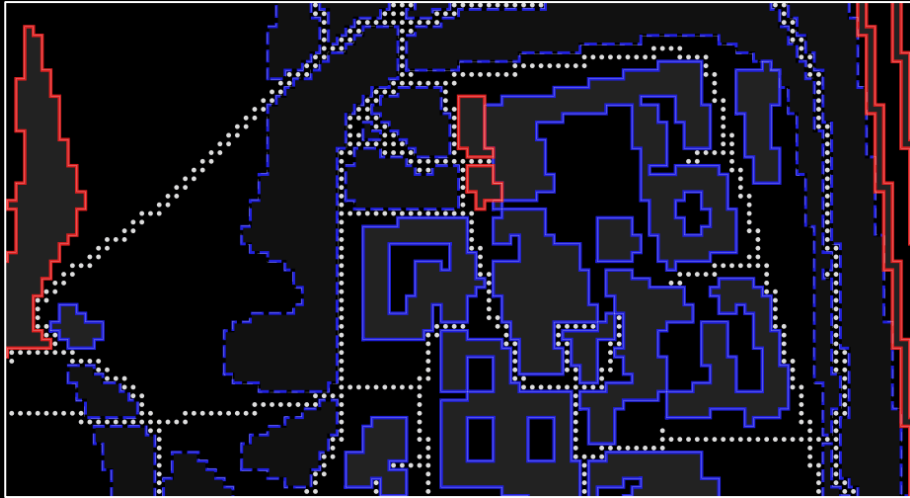
Level of Feature Abstraction

Interaction with Surroundings



Level of Feature Abstraction

???



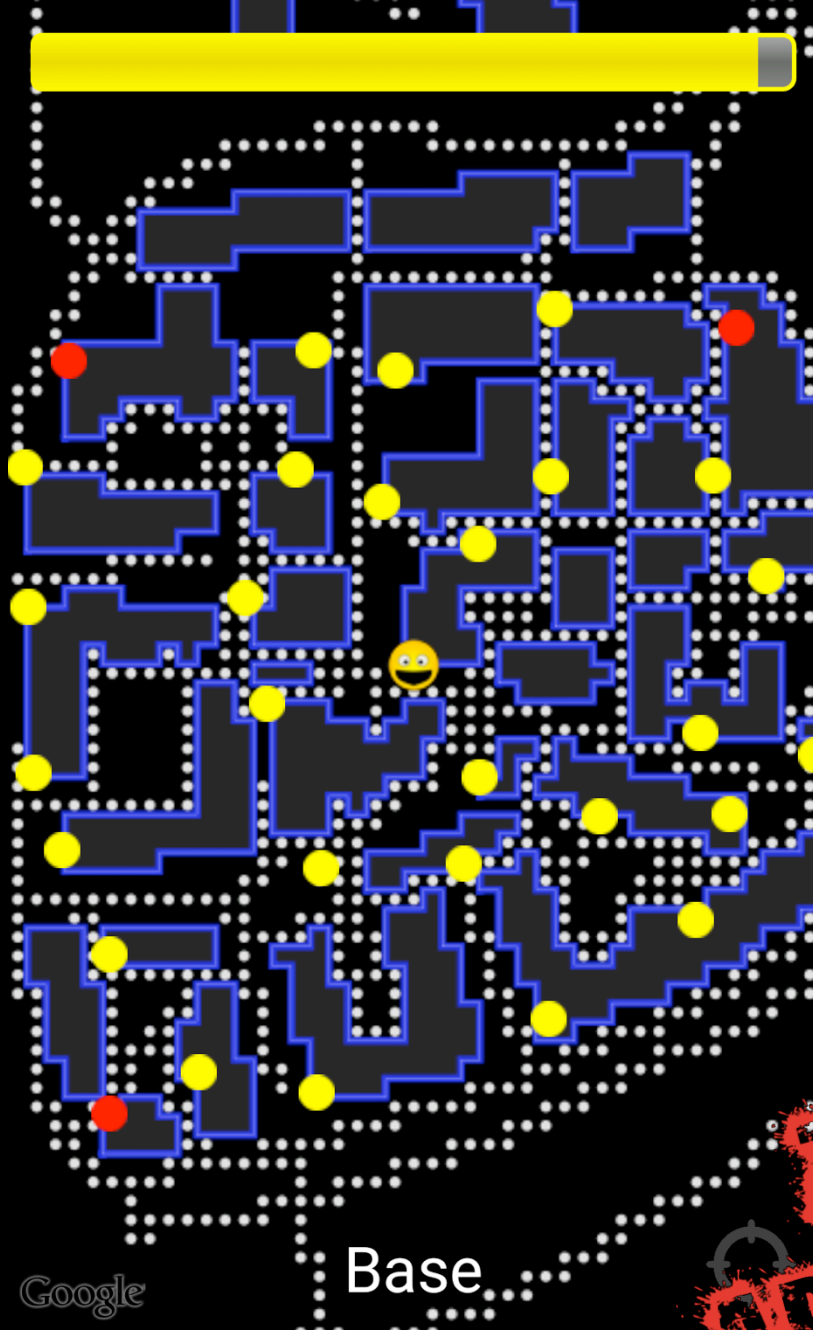
ABSTRACT FEATURE REPRESENTATION

SAT-NAV

TOURISM?
LEGIBILITY?
GEOCACHE?
MUSEUM?

READY TO

PLAY...?



Google

Base

ZOMBIE
APOCALYPSE

